

No. 610,544.

Patented Sept. 13, 1898.

E. E. KUTZ.

STAIR ROD.

(Application filed Apr. 28, 1898.)

(No Model.)

Fig. 1.

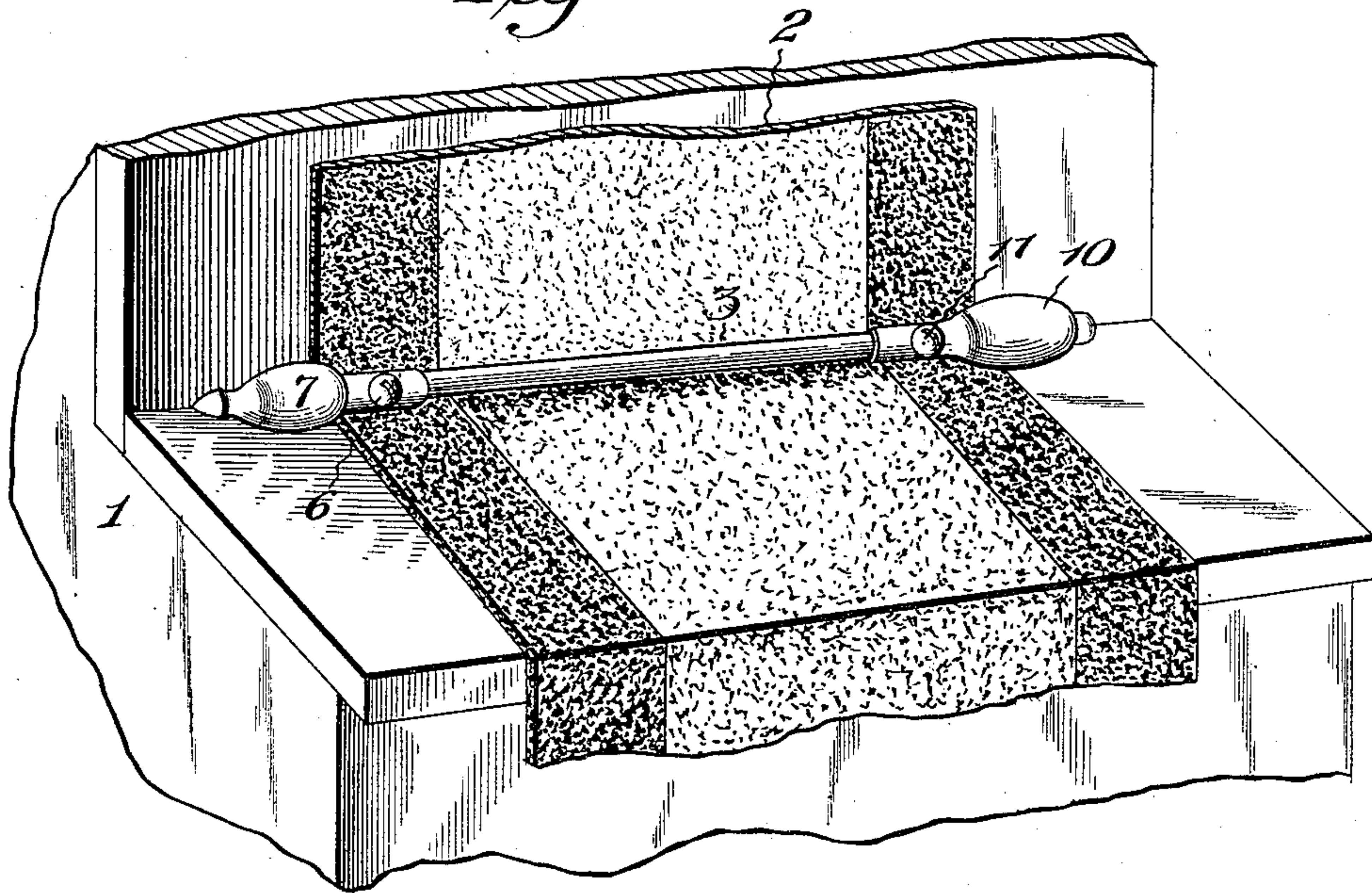


Fig. 2.

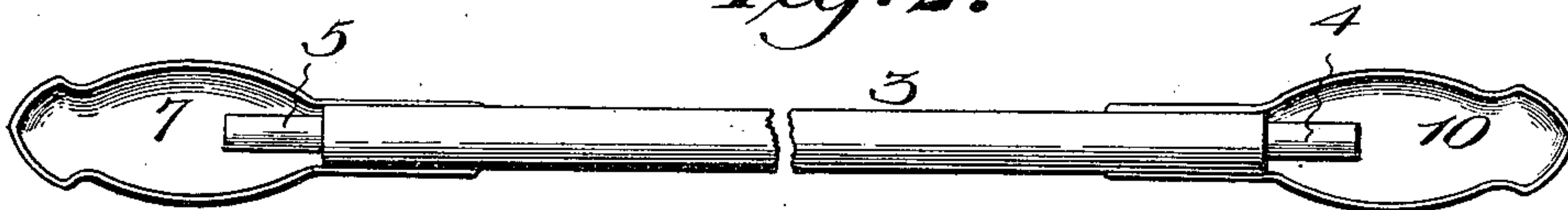


Fig. 3.

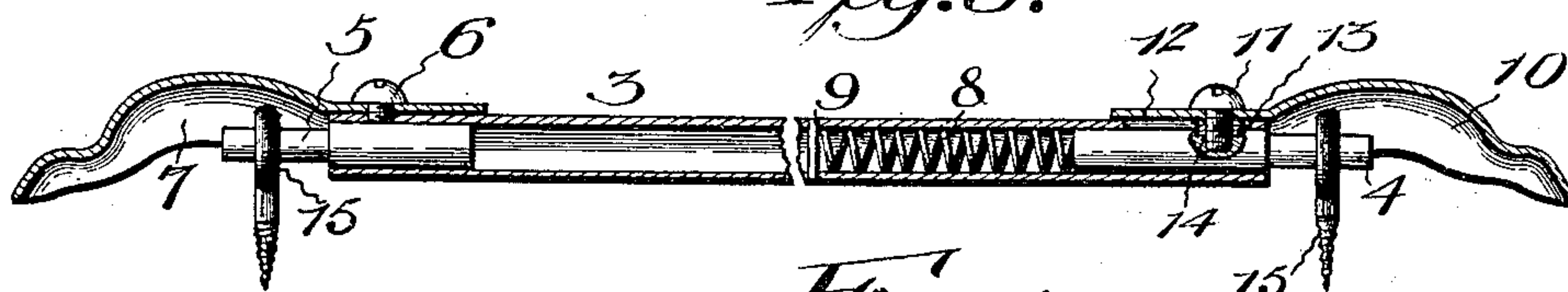
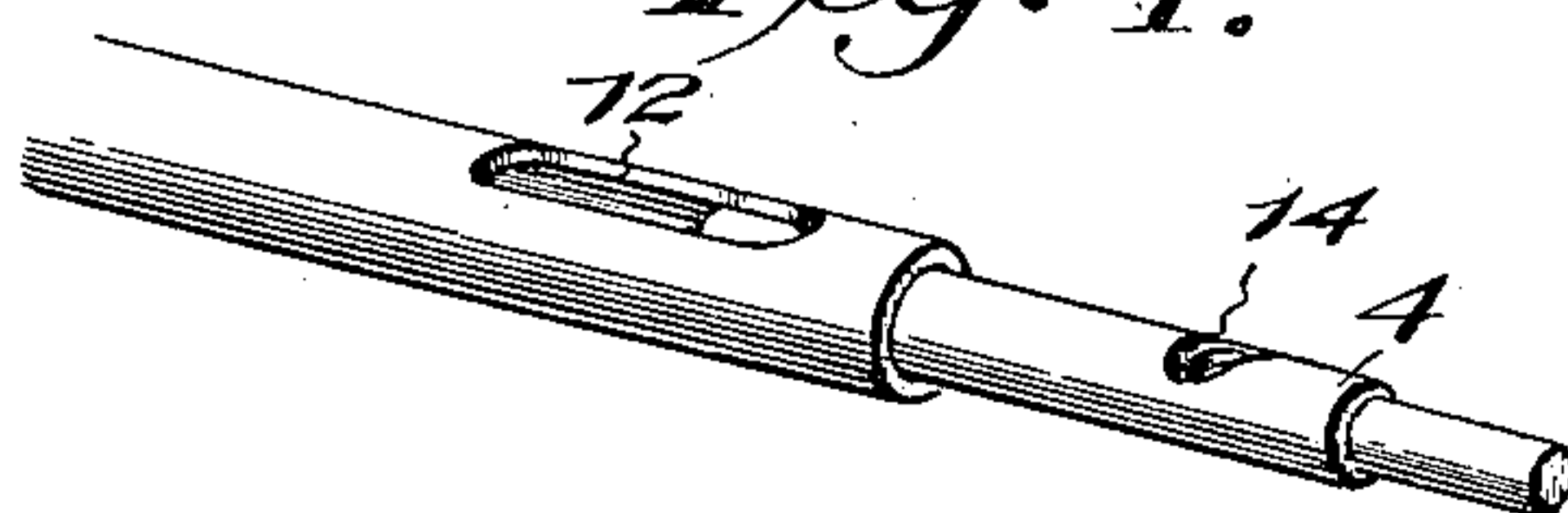


Fig. 4.



Witnesses:-

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By His Attorneys,

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UNITED STATES PATENT OFFICE.

ERWIN E. KUTZ, OF EASTON, PENNSYLVANIA.

STAIR-ROD.

SPECIFICATION forming part of Letters Patent No. 610,544, dated September 13, 1898.

Application filed April 28, 1898. Serial No. 679,089. (No model.)

To all whom it may concern:

Be it known that I, ERWIN E. KUTZ, a citizen of the United States, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented a new and useful Stair-Rod, of which the following is a specification.

This invention relates to certain new and useful improvements in stair-rods or devices for securing stair-carpet in place.

10 The objects of the present invention are to provide a stair-rod having an adjustable end, with cap-plates covering and protecting the ends of the rod, one of the cap-plates being adapted to form an operating-handle for moving the adjustable end of the rod. These and other objects and advantages of my improved stair-rod will be hereinafter more fully shown and described, and particularly pointed out in the appended claims.

20 In the accompanying drawings, Figure 1 is a perspective view of my invention applied in position upon a stairway. Fig. 2 is a rear view of the rod. Fig. 3 is a longitudinal sectional view thereof. Fig. 4 is a detail view of one end of the rod and the adjustable extension.

Corresponding parts in the several figures are denoted by like characters of reference.

Referring to the accompanying drawings, 30 1 designates a section of an ordinary stairway having a strip of carpet 2 held thereon by the employment of my improved rod.

3 designates the rod proper of my invention, which is provided at each end with extending pins or fingers 4 and 5, respectively. These pins are preferably arranged one stationary and the other adjustable longitudinally with respect to the rod for the purpose of disengaging the rod from the eyes 15, which 40 confine it in place. The rod may be made hollow, as shown, with the stationary pin 5 secured within the end thereof by a screw 6, which also serves to secure a plate or cap-piece 7 upon the extremity of the rod. The 45 pin 5, being connected to the rod by the screw 6, is adjustable to fit the rod to the different widths of stair-carpet, the cap 7 being sufficiently long to permit of this adjustment. Each end of the rod is intended to be provided with such a cap-piece, which serves to 50 conceal the extremities of the rod, also the screw-eyes, presenting an ornamental appearance,

as well as protecting the screw-eyes from becoming loosened or displaced. These cap-plates may be of any preferred shape or design so long as they accomplish the desired result, as heretofore explained, yet they are preferably dished or concaved to completely inclose the ends of the rod and screw-eyes. The purpose of the cap-plates 7 is to conceal and protect the screw-eyes, for when not so protected they often become loosened and lost by being repeatedly struck by the feet of people passing up and down the stairway. These plates therefore conceal the ends of the rod and the screw-eyes or other fastening and present an ornamental appearance, as well as protecting the fastenings of the rod.

The sliding pin 4 is arranged within one extremity of the rod, having its inner end contacting with a suitable coiled spring 8, which is confined in place within the rod by means of a transverse stop-pin 9. The cap 10 is preferably attached to pin 4 by means of a screw 11, which passes through a slot 12 in the rod. A washer 13 is preferably placed upon the screw 11 and seated within an annular depression 14 in the sliding pin 4 and extends above the face of the rod in order to space the cap 10 away from the rod, and thus prevent wearing and loosening of the cap.

The operation of my invention is as follows: Screw-eyes are secured in place at each side of the stair-carpet. The stationary pin is then placed in one of the eyes, and the sliding pin is then drawn back by use of the ornamental cap as an operating-handle and the rod placed in position to shoot the sliding pin within the screw-eye when the pressure of the hand is released from the cap-plate. In this manner the rod is placed in position and can be as readily withdrawn, as will be understood from the foregoing description, reference being had to the accompanying drawings.

I have shown the rod hollow and the pin 5 separate therefrom; but the rod may be solid and constructed of wood or metal, with the stationary pin an integral part thereof and the cap-plate permanently secured upon the pin, or both of the pins may be made adjustable, as desired. When the rod is solid, the end of the rod should be hollow to receive the sliding pin and coiled spring. These and

other changes may be made without departing from the spirit and scope or sacrificing any of the advantages of my invention, and I therefore do not wish to be understood as
5 limiting myself to the precise construction and arrangement of parts as herein shown and described.

Having thus described my invention, I claim and desire to secure by Letters Patent—
10 ent—

1. In a device of the class described, the combination with screw-eyes or their equivalents, of a rod proper having a sliding spring-actuated pin arranged at one end thereof and
15 a stationary pin at the other end, and cap-plates for the ends of the rod, one of said cap-plates being carried by the sliding pin and providing an operating-handle therefor, substantially as set forth.

2. In a device of the class described, the combination with screw-eyes or their equivalents, of a rod proper, said rod having an adjustable extremity, comprising a sliding pin mounted within one end of the rod, and a
20 spring incased within the rod and bearing against the inner end of the sliding pin to hold the same normally in extended position, an ornamental cap-plate carried by the sliding pin and secured thereto by a screw or
25 rivet, a slot in the rod forming a guide for the latter screw, and a washer interposed be-

tween the sliding pin and the cap-plate to space the same apart, substantially as and for the purpose set forth.

3. In a device of the class described, the combination with screw-eyes or the like, of a
35 rod proper having cap-plates provided upon the ends thereof, and a sliding spring-actuated pin arranged within one end of the rod, the latter end being provided with a longitudinal slot, and a screw connecting one of the
40 cap-plates to the sliding pin and entering said slot, said cap-plate thereby forming an operating-handle therefor, substantially as set forth.

4. In a device of the class described, the combination with a hollow rod, of a removable pin, held stationary, provided at one end
45 thereof, a removable and sliding spring-actuated pin at the other end of the rod, and cap-plates covering the pins, each cap-plate being secured to its respective pin by the
50 same fastening means that holds the pin to the rod, substantially as set forth.

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

ERWIN E. KUTZ.

Witnesses:

J. MCC. SNYDER,
W. C. UNDERWOOD.