

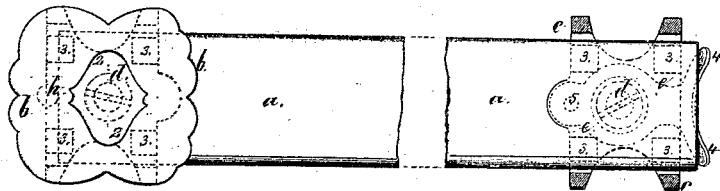
*R. Hutchinson,*

*Stair Rod.*

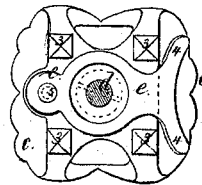
*No. 110,975.*

*Patented Jan. 17. 1871.*

*Fig. 1.*

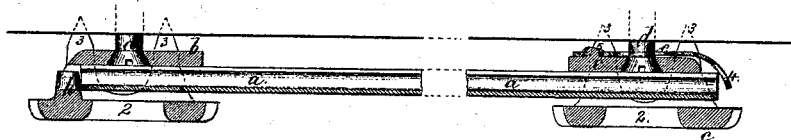


*Fig. 2.*



*Fig. 4.*

*Fig. 3.*



*Witnesses,*

*Chas. H. Smith*

*Geo. D. Hallen*

*Robert Hutchinson.*

*Lemuel W. Perrell atty.*

# UNITED STATES PATENT OFFICE.

ROBERT HUTCHISON, OF NEWARK, NEW JERSEY, ASSIGNOR TO WILLIAM B. GOULD, OF SAME PLACE.

## IMPROVEMENT IN STAIR-ROD-FASTENINGS.

Specification forming part of Letters Patent No. 110,975, dated January 17, 1871.

### *To all whom it may concern:*

Be it known that I, ROBERT HUTCHISON, of Newark, in the county of Essex and State of New Jersey, have invented and made a new and useful Improvement in Stair-Rod Fastenings; and the following is declared to be a correct description thereof.

Stair-rods have heretofore been introduced endwise through eyes and through loops fastened upon the stairs. In these cases the rod was liable to work out of the eye or loop, and the ends of the rod itself were unsightly, because they were exposed to view.

End pieces have been made for the rod, such end pieces having either a swinging lid or cap, or else the rod was pressed into a socket containing a spring-button, and then the other end entered into a socket without the spring.

My invention is made for dispensing with the swinging end pieces, that are liable to be turned aside, and are unsightly, and work loose, and also to dispense with a socket and a spring, that is liable to be broken by the endwise compression of the rod; and at the same time my fastening becomes an ornamental end to the rod.

My invention consists in a loop for the end of the stair-rod, with a spring-finger attached at the back, and coming up at an inclination near the end of the rod itself, and partially or entirely behind the ornamental loop, so as to prevent end motion to the rod, except when sufficient power is applied to the rod to cause the end to press back the spring-finger, and allow the rod to pass out. The loop at the other end of the rod may have a spring-finger, as aforesaid, or a stop-pin, as it is not necessary that the rod should slide through both loops.

In the drawing, Figure 1 is an elevation of the rod, with the loop at one end in section. Fig. 2 is an end view of the rod, loop, and spring; and Fig. 3 is a sectional plan of the rod and loops.

The stair-rod *a* is to be of any desired size or shape, and the ornamental loops *b* and *c* are to be adapted to receive the ends of the

rod. The ornamental configuration may vary; but I prefer and use an ornament with an open center, at 2, to give access in inserting or withdrawing the screw *d*, by which the loop is affixed to the riser of the stair. The pointed studs 3 3 at the back of the loop serve to prevent its turning around upon the screw *d*, and also to raise the loop slightly from the vertical face of the riser, and give room for the body portion *e* of the spring-fingers 4 4.

The spring *e* is shown by dotted lines in Fig. 1, and by a rear view, Fig. 4. The spring is to be attached by a rivet or screw. I prefer to cast a pin, 5, with the loop, and rivet up the same to hold the spring in place; and through the spring *e* is an opening, to allow the screw *d* to pass freely through.

The ends of the spring *e*, forming the fingers 4 4, are bent up so as to come at the ends of the rod and retain the same in place; but when the rod is pressed endwise against these fingers with a sufficient force, they yield, and allow the rod to be slipped out.

The loop *b* is shown with the pin *h*, to prevent the rod being slipped along endwise in the same.

I claim as my invention—

1. A spring-finger attached to the metallic stair-rod loop, and acting against the end of the rod to retain the same in place, but to yield when the rod is moved endwise, and allow the rod to slip past the finger for its removal, substantially as set forth.

2. The spring *e*, attached at the back of the loop *c*, and made with an opening that allows the screw to pass freely, and with fingers that are bent up to take the end of the stair-rod, substantially as set forth.

3. The open loop *b* for a stair-rod, made with the projecting studs 3 and stop-pin *h*, substantially as and for the purposes set forth.

Dated this 15th day of November, A. D. 1870.

ROBERT HUTCHISON.

Witnesses:

J. WHITEHEAD,  
JNO. J. KING.