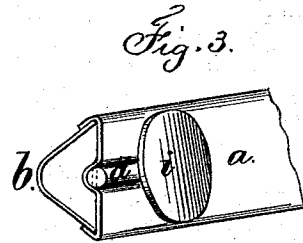
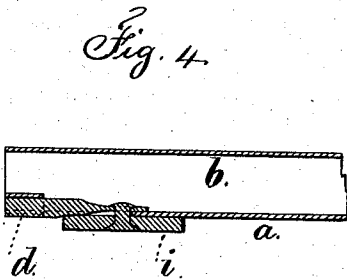
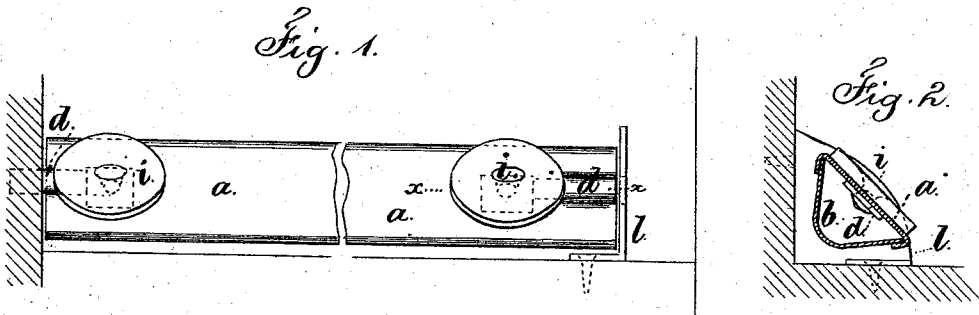


H. IVERSEN.
Stair-Rods.

No. 155,028.

Patented Sept. 15, 1874.



Witnesses
Chas. H. Smith
Geo. T. Pinckney

Inventor
Hans Iversen
per L. W. Serrell
att'y

UNITED STATES PATENT OFFICE.

HANS IVERSEN, OF NEW YORK, N. Y.

IMPROVEMENT IN STAIR-RODS.

Specification forming part of Letters Patent No. 155,028, dated September 15, 1874; application filed August 1, 1874.

To all whom it may concern:

Be it known that I, HANS IVERSEN, of the city and State of New York, have invented an Improvement in Stair-Rods, of which the following is a specification:

Stair-rods have been made with an iron band, over which thin brass or German silver has been drawn and the rods bent to shape. Triangular rods of wood and metal have been used.

My improvement is especially intended for stairs where a wide carpet is used; and there is not sufficient width on the stairs at the sides of the carpet to allow for the ordinary end loop and endwise movement in first one direction and then the other as the rod is inserted into place.

I employ a metal rod that is hollow, and generally of a triangular form, the back being of one strip of metal and the face of a different strip, and having its edges folded back behind the edges of the rear strip; and into the ends of this hollow rod bolts are inserted, and either or both are actuated by a knob or projection at the surface of the rod, and said bolts are both moved, or only one, so as to bolt the rod either to the casing at the sides of the stair or to eyes specially provided, so that the rod can be nearly as long as the width of the stair.

In the drawing, Figure 1 is an elevation of the ends of the rod. Fig. 2 is a cross-section of the bar. Fig. 3 is an end view, and Fig. 4 is a horizontal section at the line *x*.

The surface of the rod is more or less ornamental. I have shown the metal face *a* as flat. The edges of this metal face *a* are turned back, and retain the back plate *b*, such back plate being V-formed, and of less expensive metal than the face of the rod. This construction renders the rod very strong and cheap.

At the same time it is hollow, and receives the bolts at the ends. The bolts *d* are made with a broad body at the back of the plate *a*; and near the ends of the rod there is a mortise in the plate *a*, and said plate is recessed back between such mortise and the end, so that the plate *a* comes behind the bolt; but the broad body is behind the plate *a* and the mortise therein, through which is the rivet that connects the bolt to its actuating button or disk *i*, that is more or less ornamental.

By this construction the bolt *d* can be projected beyond the end of the rod into the casing or wainscoting, and the rod can be nearly as long as the width of the stair.

When desired, an end piece can be attached into the angle between the tread and riser of the stair, into a hole in which the bolts can be projected, as seen at *l*.

It will generally be best to make the bolts at each end to move; but, if desired, the bolt at one end may be stationary, so as to be inserted into the hole in the casing as the rod is put into place, after which the moving bolt at the other end is projected into the hole prepared for its reception.

The metal forming the surface of the rod may be tinned iron planished or embossed.

I claim as my invention—

1. The hollow stair-rod made of the metal strip *a*, which extends over and secures the edges of the back *b*, as set forth.

2. The bolt *d* at the end of the stair-rod, moving in a recess in the plate *a*, and provided with the button or head *i* upon the surface of the rod, as and for the purposes set forth.

Signed by me this 30th day of July, 1874.

H. IVERSEN.

Witnesses:

GEO. D. WALKER,
GEO. T. PINCKNEY.