

G. F. KUHNLE.  
Stair-Rod Holder.

No. 214,157.

Patented April 8, 1879.

Fig 1.

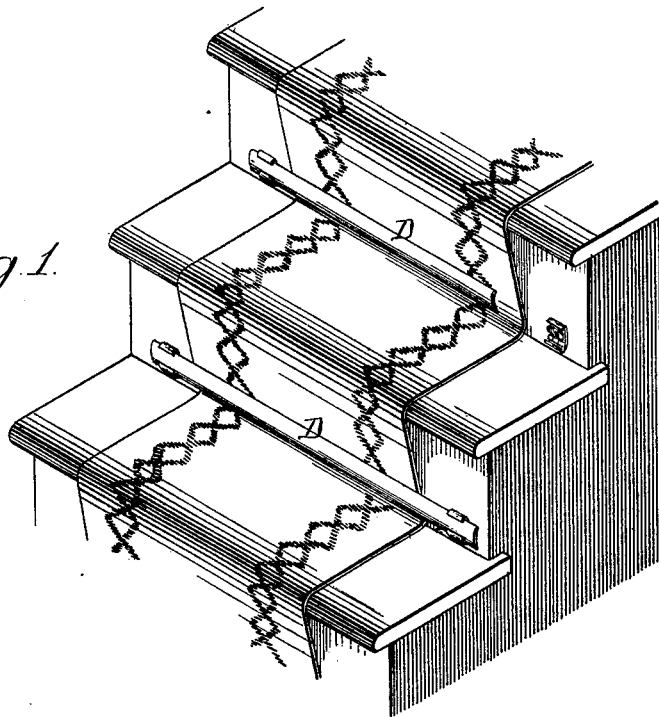


Fig 2.

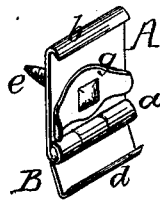


Fig 3.

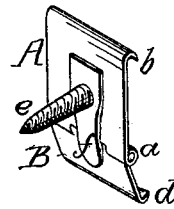


Fig 4.

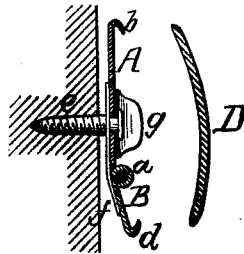
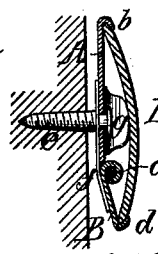


Fig 5.



Witnesses  
M. Dummer.  
Harry Smith

Inventor  
G. Frederick Kuhnle  
by his Attorneys  
Horsman and Co

# UNITED STATES PATENT OFFICE.

G. FREDERICK KUHNLE, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN STAIR-ROD HOLDERS.

Specification forming part of Letters Patent No. **214,157**, dated April 8, 1879; application filed February 21, 1879.

*To all whom it may concern:*

Be it known that I, G. FREDERICK KUHNLE, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Stair-Rod Holders, of which the following is a specification.

The object of my invention is to so construct a stair-rod holder that the rod can be readily applied to or removed therefrom; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of a portion of a stairway, showing the rods secured by my improved holders; Fig. 2, a perspective view of one of the holders; Fig. 3, a perspective view of the rear of the same; Fig. 4, a transverse section of the holder, drawn to an enlarged scale, and showing the rod detached; and Fig. 5, the same with the rod applied.

The holder consists of two metal leaves, A B, hinged together at *a*, the leaf A having at the upper edge a hooked flange, *b*, and the leaf B having at the lower edge a hooked flange, *d*. The leaf A has at the back a screw, *e*, by means of which it is secured to the front of a riser of the stairs. To the back of the leaf A is secured a spring, *f*, which so acts upon the leaf B as to maintain the same in the position shown in Fig. 4.

In order to apply the rod D to the holder the upper edge of the said rod is first fitted in the hooked flange *b* of the leaf A, and its lower edge then pressed upon the hooked flange *d* of leaf B, so as to move the latter back until it catches upon the said lower edge

of the rod. When the rod is in this position it has compressed a spring, *g*, which is secured to the front of the leaf A, and this spring, being under tension, serves to press the rod against the hooked flanges, and causes friction sufficient to prevent the longitudinal displacement of the rod.

When it is desired to remove the rod, the leaf B of each holder is forced back until its hooked flange is clear of the lower edge of the rod, when the latter is free to be withdrawn in the direction of the arrow, Fig. 5.

Instead of the flat spring *f*, a coiled spring surrounding the hinge-pin, and having an arm for acting on the leaf B, may be used; but the flat spring is preferred.

I claim as my invention—

1. A stair-rod holder in which a leaf, A, having a hooked flange, *b*, is combined with a leaf, B, hinged to the leaf A, and having a hooked flange, *d*, as set forth.

2. The combination of the leaf A with the hinged leaf B and the spring *f*, for acting on the same, as specified.

3. The combination of the stair-rod with the holder, consisting of two hooked leaves hinged together, and having a spring, *g*, all substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

G. FREDERICK KUHNLE.

Witnesses:

WILLIAM COOPER,  
HARRY SMITH.