

(No Model.)

A. D. FIELD.
FASTENER FOR STAIR RODS.

No. 406,827.

Patented July 9, 1889.

Fig. 1.

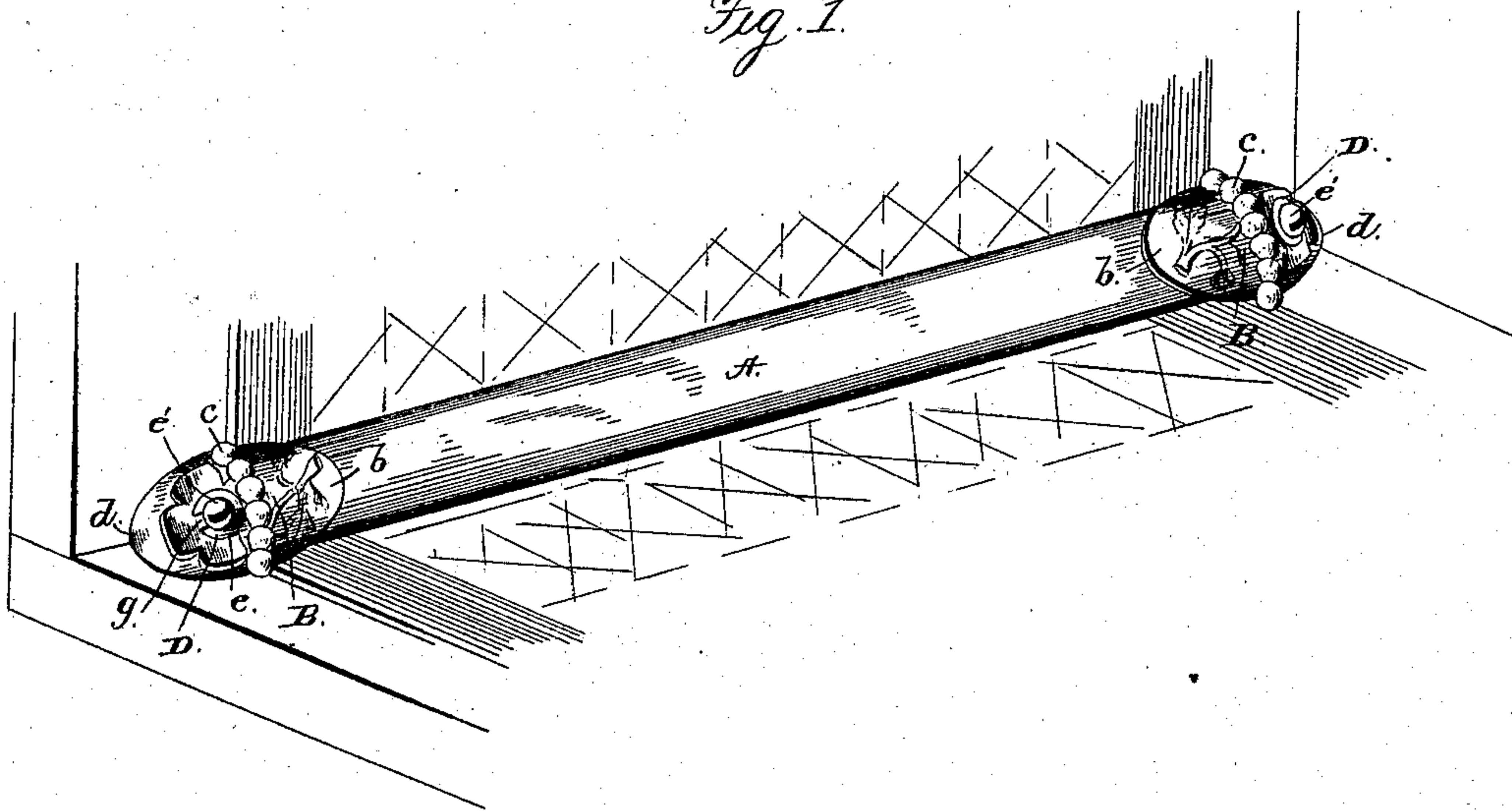


Fig. 2.

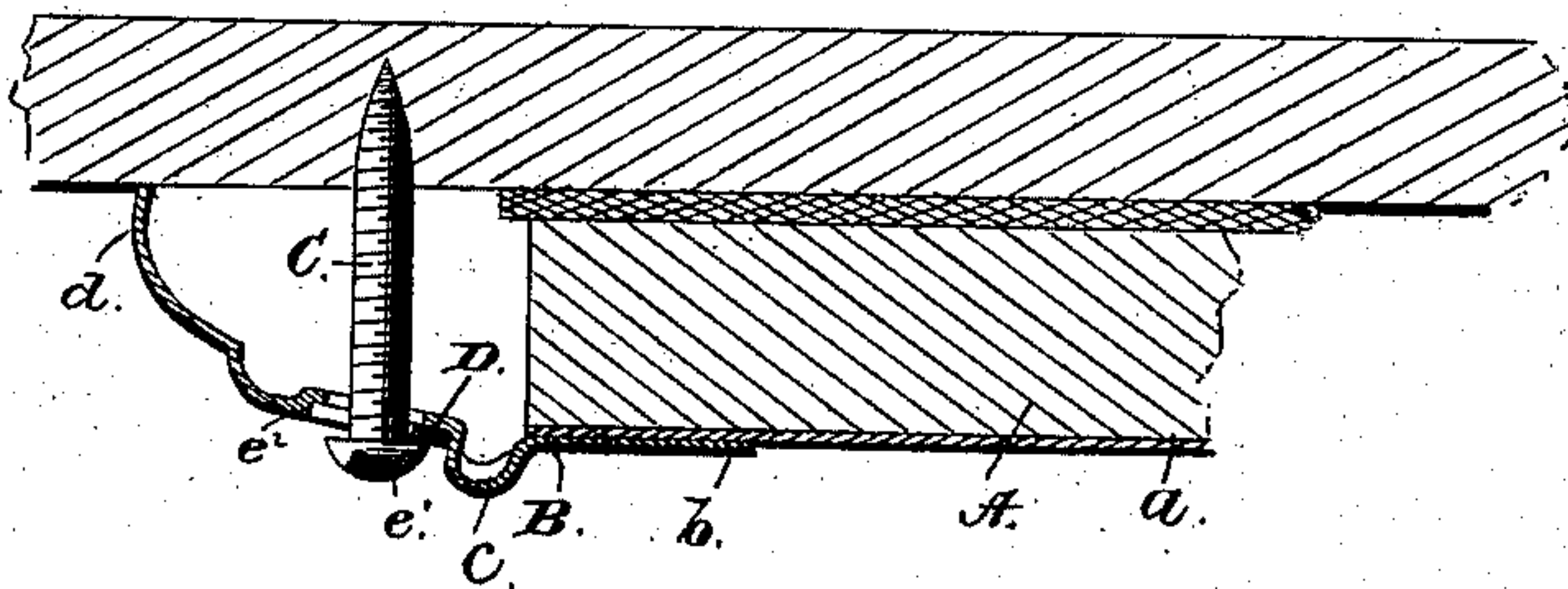


Fig. 3.

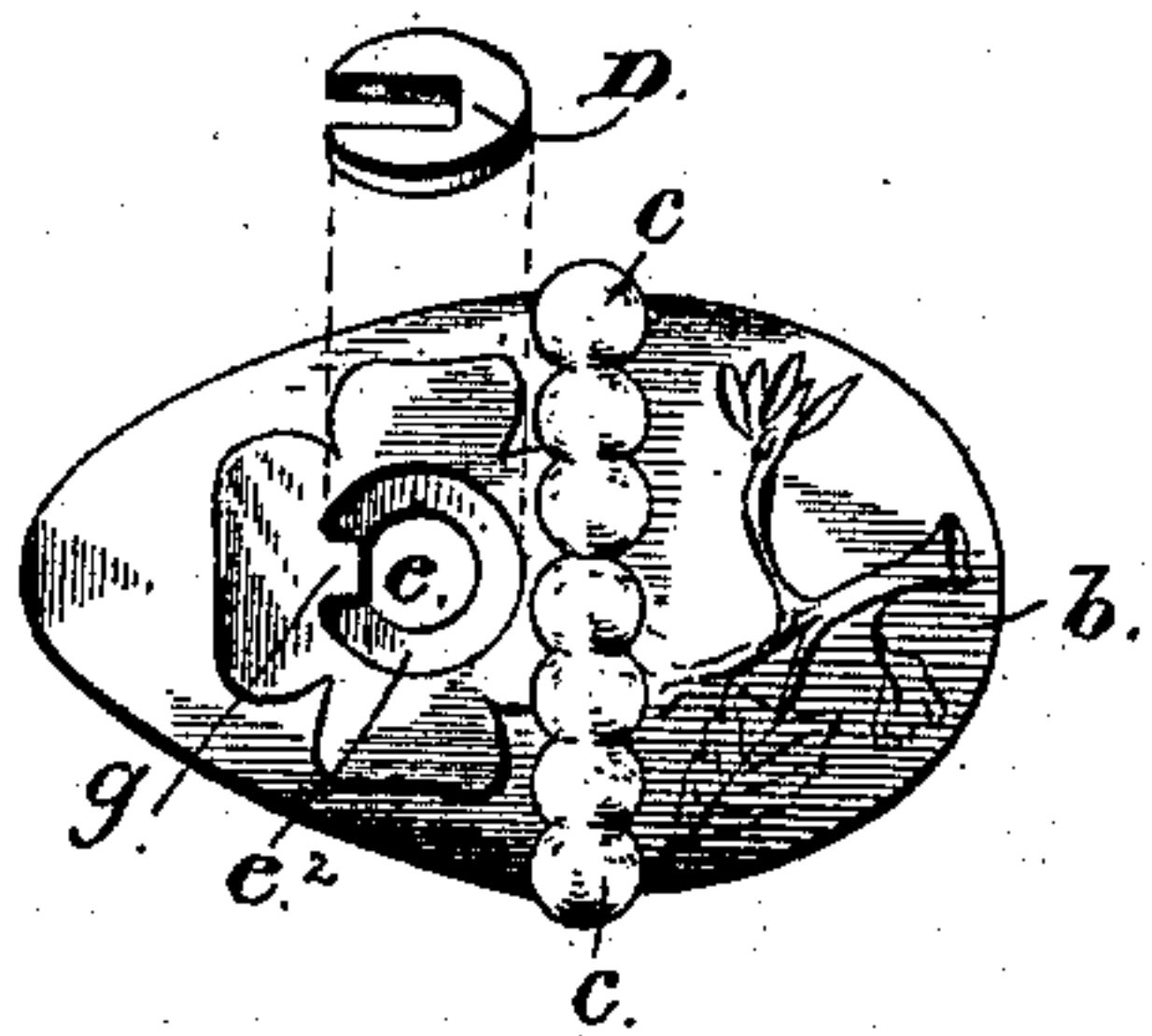


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT D. FIELD, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE GLOBE CURTAIN POLE COMPANY, OF SAME PLACE.

FASTENER FOR STAIR-RODS.

SPECIFICATION forming part of Letters Patent No. 406,827, dated July 9, 1889.

Application filed August 31, 1888. Serial No. 284,228. (No model.)

To all whom it may concern:

Be it known that I, ALBERT D. FIELD, a resident of Waterbury, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Fasteners for Stair-Rods; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in stair-rods, and more particularly to an improved fastener for the same, the object being to provide a cheap, light, strong, and serviceable device for the purpose, which can be quickly applied or removed, and when in operative position will present a neat and handsome appearance without projections that would obstruct the proper sweeping of the secured carpet.

With these objects in view my invention consists in certain features of construction and combinations of parts which will be clearly indicated in the drawings, specification, and claims that follow.

In the drawings, Figure 1 is a view in perspective of a stair-rod in position held by the improved fasteners. Fig. 2 is a detached view of one of the fasteners, each of the separable portions being shown. Fig. 3 is a view of the clamping-shell of one fastener. Fig. 4 is a cross-section of a stair-rod with a fastener applied thereto.

A is a stair-rod, preferably made of wood in triangular form, two of its sides forming a right angle, which fits into the corner produced by the junction of the horizontal step and vertical riser-board in a flight of stairs. The exposed third side *a* of the triangular rod A is faced with sheet metal stamped into slightly-curved form to conform to the rounded surface of the rod, as shown in Fig. 4, and in order to retain the metallic facing *a* in close contact with the body of the hard-wood rod the edges of the facing are bent into hook form to engage shallow longitudinal depressions made in the rod, into which the free edges of the metal facing are embedded, so as to secure the parts together firmly and produce a neat finish.

The fastening device is applied to the ends of each rod, and as they are duplicated in form on each rod a description of one will explain the construction of any number. Each fastener consists of a light metal shell B, preferably cut and stamped into form from sheet-brass or other suitable material. The shell is raised into shell form by dies, the portion *b*, that has a bearing upon the end of the stair-rod A, being shaped to fit its rounded surface and thus bear evenly upon it. A stiffening-rib or rope-bead *c* is raised above the general arched form of the fastening-shell. This elevation or rib may be given any preferred contour, the object being to render the thin-plate clip or fastening-shell B sufficiently rigid and substantial to resist strain and prevent it from bending outwardly when in clamped position.

As will be seen, the other portion of the clip or fastener is shaped to give the whole device an oval form somewhat resembling the bowl of a spoon, and this similitude is rendered more complete by the peculiar formation of the outer terminal *d* of the ovate shell, as this end is furnished with a depending rib or beak, so as to project it lower than the other portion of the edge of the shell B, the intention of which is to cause the outer end *d* to bear in the vertex of the angle of the step, and thus have a purchase to cause the other end *b* to press forcibly on the stair-rod when the shell B is secured in place, as will now be explained.

At a proper point near the center of width and length of the shell B a perforation *e* is made of a size to allow the head *e'* of the retaining screw C to pass freely through said hole, and around the marginal edge of the hole *e* an annular recess *e²* is formed, which is of equal depth with exception of an elevation of radial rib *g*, which is produced in the recess, for a purpose that will be explained.

A washer D is provided, which is of such a relative outer diameter as to seat readily within the shallow recess *e²*, said washer being slotted from its central perforation through its flat wall to permit it to embrace the body of the screw C when the latter is in place.

In placing the stair-rods to hold carpet or other desired covering upon a flight of stairs, said covering is first given a proper adjustment on the stairs. A rod is then placed
 5 in the angular corner of the step, and screws C inserted in these corners near the edge of the carpet, so as to project sufficiently to have their heads pass through the holes *e*, permitting the washers D to slide into the recesses
 10 *e*² and seat therein. The slots made in the washers engaging the ribs *g* prevent the washers from turning when the screws are further inserted to clamp the ends of the stair-rod in an obvious manner.

15 It will be noticed that from the peculiar shape of the edge of the fastener B and its ovate arched contour the device is rendered substantial with the expenditure of minimum weight of material, and is adapted to engage
 20 the horizontal and vertical portions of a step near the vertex of the right-angled junction of these portions, so as to be prevented from lateral displacement, and render a single screw in each available for securely attaching
 25 the shells B in place and cause them to bite upon the ends of the stair-rods to hold them firmly clamped in position on the carpet.

When the carpet is to be removed, it is only necessary to slacken the screws C enough to
 30 permit the washers D to be removed, when the fasteners B may be lifted off and the rod displaced, and for temporary removal of the rods it is merely necessary to relax the screws and remove but one fastener-shell, when the
 35 rod may be displaced readily.

I am aware that triangular stair-rods have been in use, and that it is not new to utilize wood for stair-rods or to cover the same with sheet-metal facing; hence I do not desire to
 40 broadly claim such a construction of the rods.

I would also specify that the rods may be made of other shape and the fasteners adapted to conform thereto, and, further, that the shells or fasteners B may be cast into form
 45 and given any preferred style of ornamentation by dies, chasing, plating, &c.

I have described the washers D as having

a single slot made from their center holes to the peripheral edge to permit them to be slid into place below the clamping-screw heads *e'*
 50 and be engaged by the ribs *g*. I do not wish to limit myself to the use of a single slot in the washer, as these may be cut in two or more pieces and be seated in the recesses *e*²; nor do I wish to be restricted to the use of circular washers with slots that engage a rib or
 55 stop *g*, as it will be an equivalent form of construction to give the peripheral edge of the washer a polygonal form and make the edge of the shallow recess to correspond there-
 60 to in shape, thus dispensing with the use of a rib *g*, it being understood that said polygonal washers are slotted to slip on the screws, as in the circular washers, or be cut into sections for the same purpose.

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

1. In a stair-rod fastener, the combination, with a shell provided with a single hole and
 70 a slotted washer, of a screw the head of which is adapted to pass through the hole in the shell and be engaged by the washer, substantially as set forth.

2. In a stair-rod fastener, the combination, 75 with a shell having a screw-hole therein and a rib, of a clamping-screw and a slotted washer adapted to rest under the head of the screw and engage the rib, substantially as set forth.

3. As a new article of manufacture, a shell having a screw-hole therein for the passage of the head of a screw and a slotted washer, the latter adapted to rest on the shell and engage the under side of the head of the screw, 85 substantially as set forth.

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

ALBERT D. FIELD.

Witnesses:

CHAS. W. GILLETTE,
 THOMAS DONOHUO.