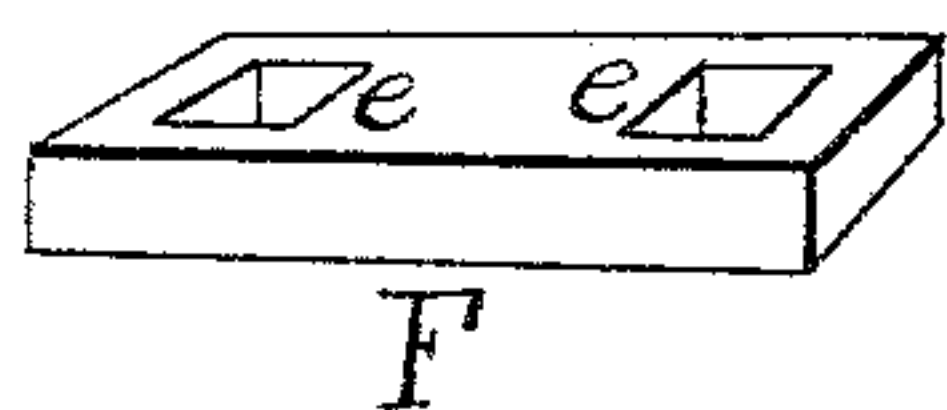
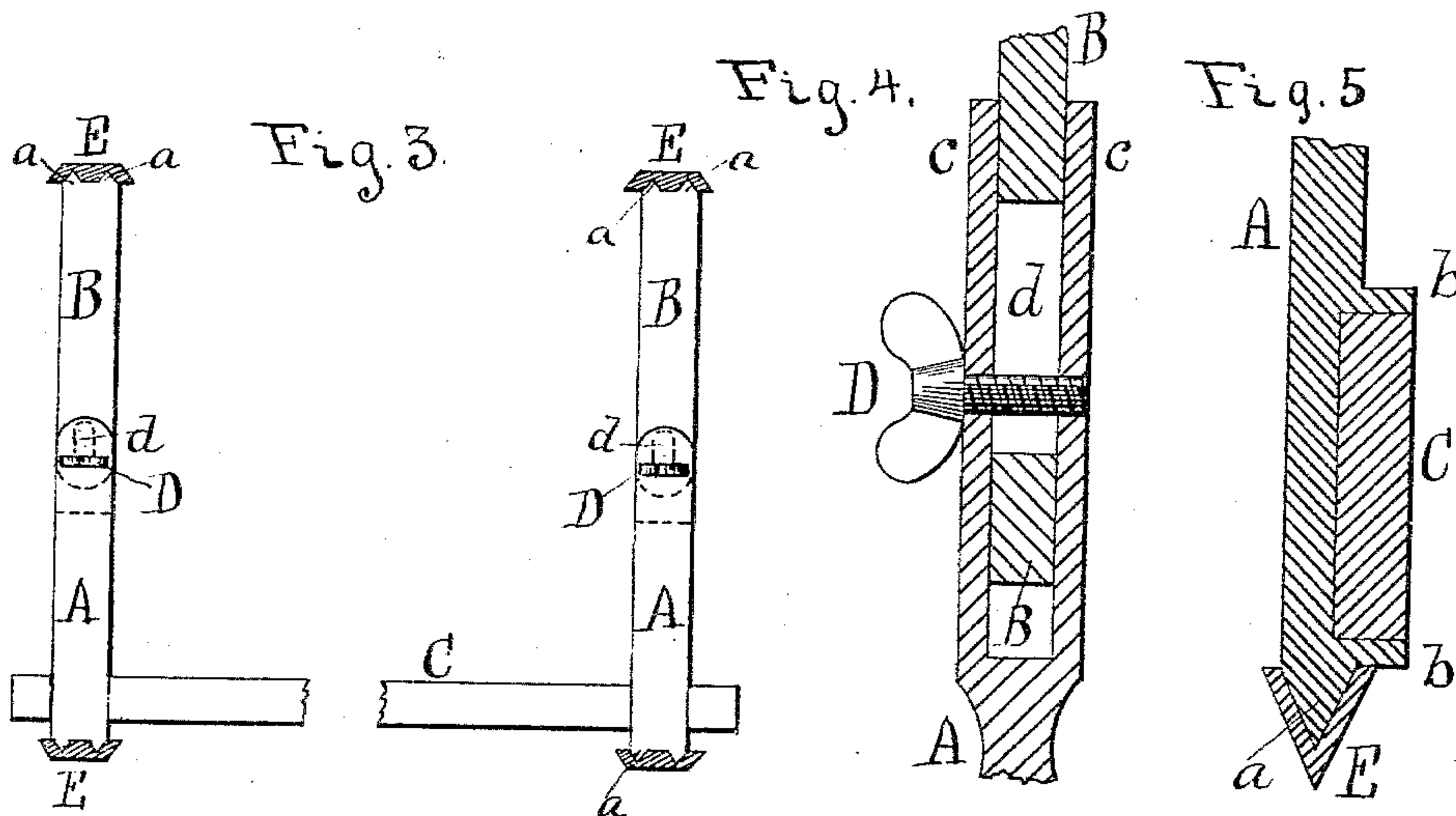
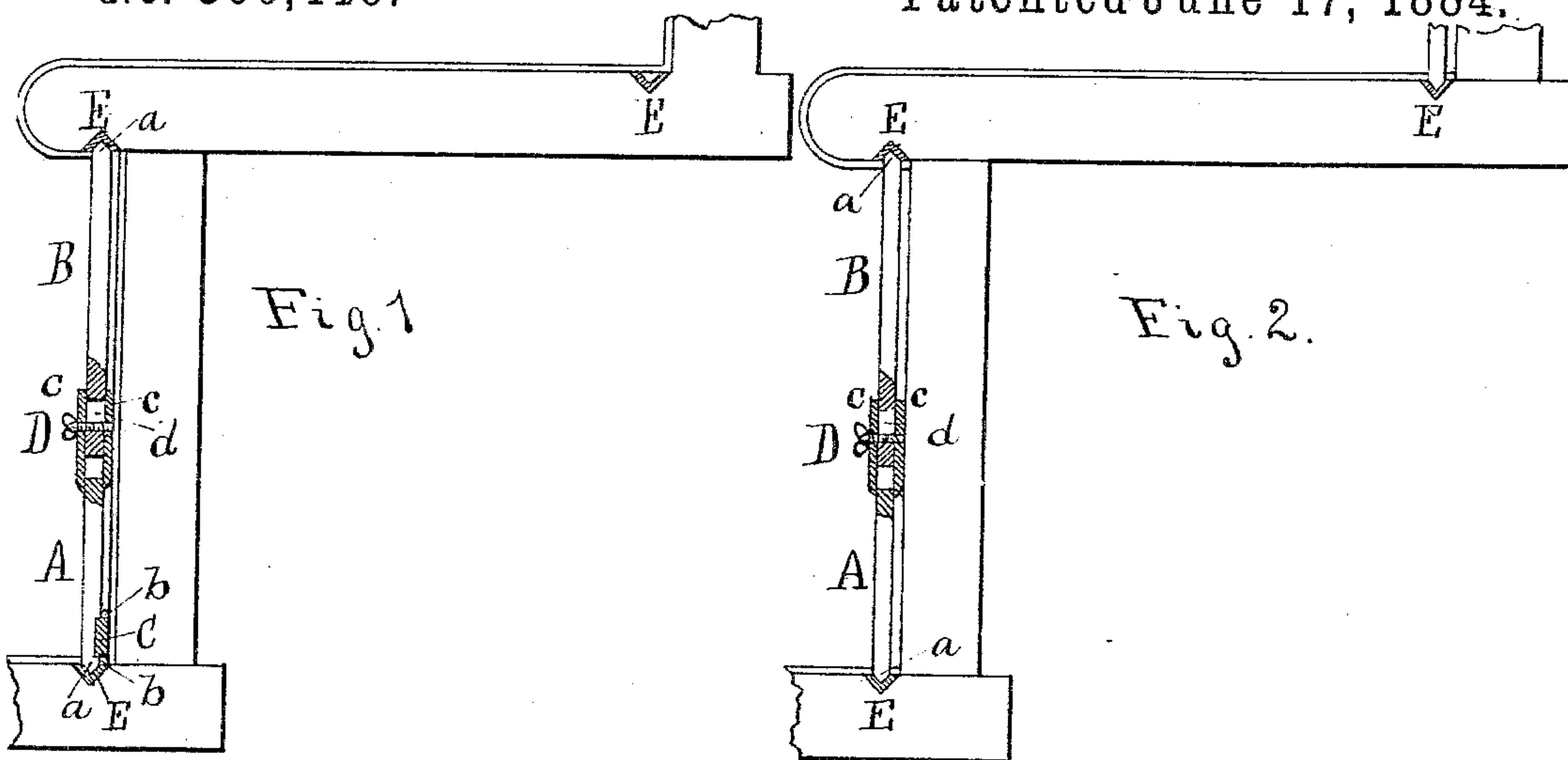


(No Model.)

Z. A. VAN DEVENTER.
STAIR CARPET FASTENER.

No. 300,416.

Patented June 17, 1884.



WITNESSES:

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ZENAS A. VAN DEVENTER, OF WILMINGTON, DELAWARE.

STAIR-CARPET FASTENER.

SPECIFICATION forming part of Letters Patent No. 300,416, dated June 17, 1884.

Application filed February 13, 1884. (No model.)

To all whom it may concern:

Be it known that I, ZENAS A. VAN DEVENTER, a citizen of the United States, residing at Wilmington, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in Stair-Carpet Fasteners; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention consists in improved stair-carpet-fastening devices, by means of which stair-carpets may be easily and readily put down and taken up without the use of hammers or screw-drivers, tacks, or screws, and which can be used for any height of stairs.

In the accompanying drawings, Figure 1 is a side view of a stair provided with my improved fastenings. Fig. 2 is a similar view showing the fastenings as applied to stair-pads. Fig. 3 is a front view of the fastening devices. Fig. 4 is a central vertical section of a portion of the fastener proper, showing the means of securing it and of adapting it to different heights of stairs. Fig. 5 is a central vertical section of the bottom part of the fastener, and Fig. 6 is a perspective view of a plate in which the ends of the fasteners take.

Like letters designate corresponding parts in all of the figures.

The stair-carpet fastener proper is made in two parts—a lower part, A, and an upper part, B. The lower end of the part A is provided with points or prongs *a a*, which bear upon the tread of the stair, and the upper end of the part B is provided with similar points *a a*, which take under the nosing of the step above. When in position the fastener is in a vertical position and parallel with and close to the riser of the step. The rear side of the lower part, A, is provided with two lugs or projections, *b b*, between which the stair-rod C is held. The upper end of the part A of the fastener is branched to form two forks, *c c*, which embrace the lower end of the part B. The lower end of B is formed with a longitudinally-extending slot, *d*, in which works a thumb-screw, D, which passes through a hole

in the forward fork *c* of the part A and screws into the rear fork *c*. By means of this slot *d*, which may be of any desired length, the fastener may be used for any height of stair, and the thumb screw D holds the two parts A B securely together in any position.

To apply this fastener to stairs, after the carpet is placed in position, the rod C is placed between the lugs *b b* on the lower parts, A A, of two of the fasteners. The lower parts, A A, are then pressed downward, so that their points *a a* may enter the tread of the step on each side of the carpet. The upper parts, B B, are then pressed upward, so that their points *a a* are caused to enter under the nosing on each side of the carpet, and then the thumb-screw D is tightened, thus holding the parts A B securely together, and the rod C, pressing down on the carpet, secures it in place.

It will be observed that the only function of the thumb-screw is to clamp the parts A and B together, and that there is no strain at all upon it.

Both the rods and fasteners proper may be made of any suitable or desirable materials—such as wood, vulcanized fiber, rubber, brass, iron, or other metal—and may be of any suitable dimensions, and ornamented as desired. In case stair-pads of metal, rubber, or other material are used instead of a continuous carpet, the pads are bent down under the nosing, and are pierced, so as to admit a suitable number of the upright fasteners A B to hold them in position. In this case the rods C are dispensed with, and the lugs *b b* are omitted from the lower part, A, as shown in Fig. 2.

Certain objections arise in the use of the fastenings as just described, in that the points *a a* must be made sharp to pierce the tread and nosing, and these points become dulled in time, thus rendering the fastenings no longer serviceable; also, it requires considerable force and exertion to cause the points to enter the wood so as to hold securely. To obviate these difficulties I adopt special means, such as those shown more particularly in Figs. 5 and 6. The device shown in Fig. 5 is a V-shaped bearing or socket, E, which is fixed permanently to the stair, both in the tread and in the under side of the nosing, as shown in Figs. 1 and 2, so that its mouth may be flush with the surface of the wood. Its width

is preferably somewhat greater than that of the fastener, and into the groove thus formed the points *a a* enter. This device effectually prevents the lateral and forward displacement of the fastener and renders it very easy to apply, and in addition secures the uniform and regular placing of the fasteners on the several steps.

Fig. 6 shows an equivalent device, which consists in a plate, *F*, provided with two holes, *e e*, for the reception of the points *a a*. This plate is permanently secured in the tread and under side of the nosing of the stair, and is equivalent in function and operation to the socket-pieces *E*. In using either of these devices they are placed near the ends of the steps, so that they will be exposed when the carpet is laid.

It is obvious that the upright pieces need have but a single prong, *a*, in which case the plate *F* would be provided with but a single hole, *e*; also, the socket-piece *E* need not necessarily be of *V* shape, although that shape is to be preferred; and when either the plate *F* or socket-piece *E* is used there is no necessity of the points *a a* being sharp.

I am aware that it is not new to use vertical stair-carpet fasteners which engage under the

nosing of the step, nor to render such vertical fasteners capable of being used with stairs of different heights, such a fastener being shown in the patent granted to G. W. Hill, June 20, 1876, No. 178,927, and I do not broadly claim these features; but

What I do claim is—

1. A vertical stair-carpet fastener composed of two parts, the upper part being formed with points to fit under the nosing, and the lower part being formed with points to fit into the tread of the stair, in combination with means for adjusting said parts vertically in relation to each other and to hold them securely together, substantially as set forth.

2. A stair-rod fastener composed of an upper and lower part, and means for adjusting and securing said parts, said lower part being provided with two rearwardly-projecting lugs, in combination with a stair-rod adapted to be held between said lugs, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ZENAS A. VAN DEVENTER.

Witnesses:

HENRY C. CONRAD,

JOSEPH W. VANDEGRIFT.