

PATENT SPECIFICATION



Application Date : March 12, 1926. No. 6896 / 26.

265,023

Complete Left : Dec. 11, 1926.

Complete Accepted : Feb. 3, 1927.

PROVISIONAL SPECIFICATION.

Improvements in Stair Rod Eyes or Fastenings.

I, WILLIAM BRITAIN, of "Stradbroke", 122, Alderman's Hill, Palmer's Green, in the County of Middlesex, a subject of the King of Great Britain, do hereby declare the nature of this invention to be as follows:—

The invention relates to that type of stair rod eye or fastener having a horizontal portion fitting on the tread and a vertical portion fitting against the riser, the horizontal and vertical portions each carrying a projection, the one slanting upwards at an angle of 45° to the horizontal portion, and the other slanting downwards at an angle of 45° to the vertical portion.

These projections leave a gap between them through which a stair rod of triangular section is passed from the front. Such stair rods have usually a right angle at the lower rear part and the horizontal and vertical portions are equal in length, the hypotenuse of the triangle being outwards and at 45° to the horizontal and vertical in use.

According to the present invention the vertical and horizontal portions of the eye are of less thickness than the carpet, and the section of the stair rod is of such dimensions that it may be placed in position within the two projections from the front.

The hypotenuse of the triangular section is greater in length than the gap between the projections. Each projection is cut away on its inner face to form seatings to receive the hypotenuse.

These seatings allow the hypotenuse to fit therein easily, and they retain the hypotenuse behind the extreme ends of the two projections.

Instead of cutting away the projec-

tions on their inner faces they may each be provided with a short pin projecting at right angles to their general line. These pins would be arranged at such a distance apart as to easily receive the hypotenuse of the rod.

The screws for fixing the eyes may pass through the horizontal and vertical portions thereof within the projections, or the horizontal and vertical parts may extend beyond the projections, and the screws may be passed through the extensions of the eye.

In order to fix a rod in position the lower front angle is inserted within the eye resting upon the carpet. In this position the upper angle will rest against the front edge of the upper projections. A slight pressure against the upper edge of the stair rod will then cause it to compress the carpet and to snap into position behind the projections and within the seatings formed in the interior thereof.

If desired the two angles fitting against the projections may each have a small gap cut therein to fit against each side of the pins thereby preventing accidental longitudinal motion of the stair rod.

In order to remove the stair rod it is only necessary to apply pressure to the lower edge of the rod in an inward and downward direction, thereby removing the front and top angles from their seatings. The rod may then be rocked forwards and out of the eye.

Dated the 12th day of March, 1926.

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COMPLETE SPECIFICATION.

Improvements in Stair Rod Eyes or Fastenings.

I, WILLIAM BRITAIN, of "Stradbroke", 122, Alderman's Hill, Palmer's Green, in the County of Middlesex, a subject of the King of Great Britain, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

The invention relates to that type of stair rod eye or fastener having a horizontal portion fitting on the tread and a vertical portion fitting against the riser, the horizontal and vertical portions each carrying a projection, the one slanting upwards at an angle of 45° to the horizontal portion, and the other slanting downwards at an angle of 45° to the vertical portion.

These projections leave a gap between them through which a stair rod of triangular section is passed from the front. Such stair rods have usually a right angle at the lower rear part and the horizontal and vertical portions are equal in length, the hypotenuse of the triangle being outwards and at 45° to the horizontal and vertical in use.

According to the present invention the vertical and horizontal portions of the eye are of less thickness than the carpet, and the section of the stair rod is of such dimensions that it may be placed in position within the two projections from the front.

The hypotenuse of the triangular section is greater in length than the gap between the projections. Each projection is cut away on its inner face to form seatings and stops to receive the hypotenuse.

These stops allow the hypotenuse to fit easily between them, and they retain the hypotenuse behind the extreme ends of the two projections.

Instead of cutting away the projections on their inner faces they may each be provided with a short pin acting as a stop and projecting at right angles to their general line. These pins would be arranged at such a distance apart as to easily receive the hypotenuse of the rod.

In order to fix a rod in position the lower front angle is inserted within the eye resting upon the carpet. In this position the upper angle will rest against the front edge of the upper projections. A slight pressure against the upper edge

of the stair rod will then cause it to compress the carpet and to snap into position behind the projections and within the seatings formed in the interior thereof.

In order to remove the stair rod it is only necessary to apply pressure to the lower edge of the rod in an inward and downward direction, thereby removing the front and top angles from their seatings. The rod may then be rocked forwards and out of the eye.

Two methods of carrying the invention into effect are shown in the accompanying drawings.

Fig. 1 is a section taken through the riser and tread of a stair, showing the improved stair rod eye or fastener with a triangular stair rod in position and a carpet retained by the same.

Fig. 2 is a front elevation of the parts shown in Fig. 1.

Fig. 3 is a section through a riser and tread of a stair showing a modified form of the stair rod fastener and also showing a triangular stair rod and carpet in position.

Fig. 4 is a front elevation of the parts shown in Fig. 3.

In the drawings *a* is the riser, *b* is the tread and *c* is the carpet. The fastener comprises a vertical portion *e*, a horizontal portion *f*, and two projections *g, g*, one slanting upwards at an angle of 45° to the horizontal portion and the other slanting downwards at an angle of 45° to the vertical portion. It will be noticed that the vertical and horizontal portions *e* and *f* of the eye or fastener are of less thickness than the carpet *c*.

As shown in Figs. 1 and 2, each projection *g* is cut away on its inner face to form a seating *h* and the end *i* of the cut away portion forms a stop. The two stops *i* are at such a distance apart as to allow the hypotenuse of the stair rod *j* to fit easily between the same. The slanting face or hypotenuse of the stair rod *j* in use is pressed against the seatings *h* by the resilience of the carpet *c*.

In the construction shown in Figs. 1 and 2 the holes for the screws *k* are formed in the horizontal and vertical portions *e* and *f*.

In the construction shown in Figs. 3 and 4 the projections *g* are of the same thickness throughout the greater part of

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- their lengths, and they are not cut away at the rear as in Figs. 1 and 2. Each projection *g* is provided with a pin *i*¹ which latter is seated against the inner face of the projection *g*. As shown in Figs. 3 and 4 the eye or fastener is provided with extensions *l* in which are formed the holes to receive the screws *k*.
- 10 If desired, advantage may be taken of the pins *i*¹ to prevent the stair rods *j* moving endwise after they have been placed in position, by forming a notch or notches near each end of the rod in which a pin *i*¹ is located when the stair rod *j* has been placed in position within the eye or fastener.
- 15 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—
- 20 1. An improved stair rod eye or fastener of the type referred to characterised by the fact that the projections are cut away on their inner faces to form seatings and stops to receive the hypotenuse of a triangular stair rod, which latter is of such dimensions that it may be placed in position within the two projections from the front, substantially as shown and described.
- 25 2. A modification of the stair rod eye or fastener claimed in Claim 1 in which each of the projections is provided with a pin at such a distance apart that they form stops for two angles of the triangular stair rod, which latter bears against the inner faces of the two projections, substantially as described and shown in Figs. 3 and 4 of the drawings.
- 30 35 40 45
- Dated the 11th day of December, 1926.
- HARRIS & MILLS,
Chartered Patent Agents,
34 & 85, High Holborn, London, W.C. 1.

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

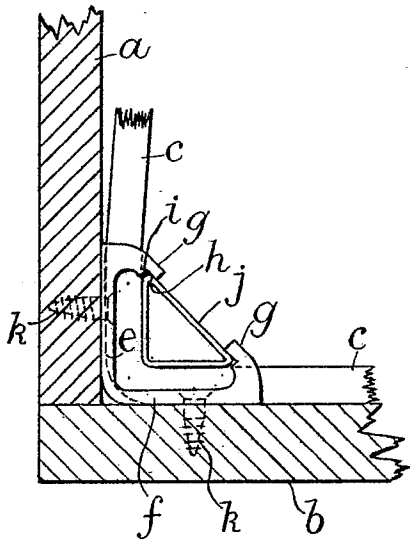


Fig. 2.

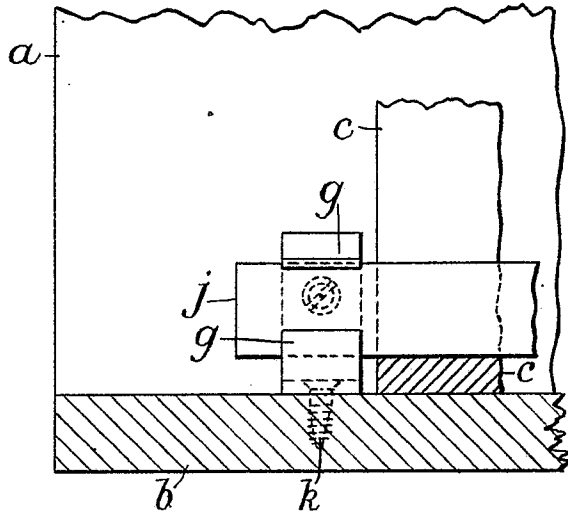


Fig. 3.

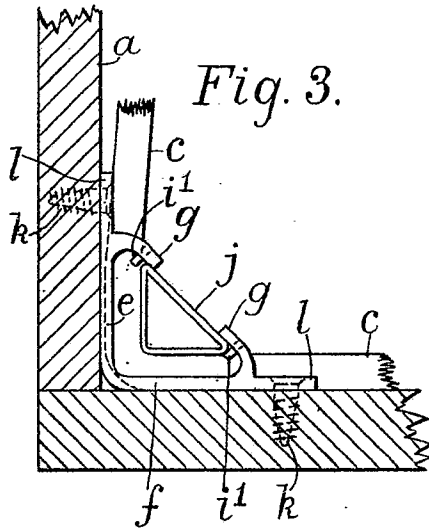


Fig. 4.

