

PATENT SPECIFICATION

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DRAWINGS ATTACHED

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(54) CURTAIN SUSPENSION ARRANGEMENTS

(71) We, SWISH PRODUCTS LIMITED, of Lichfield Road Industrial Trading Estate, Tamworth in the County of Stafford, a Company incorporated under the laws of the United Kingdom of Great Britain and Northern Ireland do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to curtain suspension arrangements.

Some known forms of curtain suspension arrangement incorporate a rail having a flat, smooth or decorative front surface. With such a rail, it is usual to suspend a glider from the rail either by engaging the glider in a groove in the rear surface of the rail or, alternatively, by engaging the glider over both the upper and lower edges of the rail. In this first case, it is not practicable to utilise a combined hook and glider for engagement in the curtain and with the rail to allow sliding along the rail. This is because there would be substantial difficulties in engaging such a combined device in a groove on the back of the rail after the device has been secured to a curtain.

When a glider is of the kind which engages over both the upper and lower edges of the rail it has to be comparatively large and cumbersome in order to span the depth from the top to the bottom of the rail.

It is to be understood that a hook-glider as referred to hereinafter means a combined suspension hook and glider.

According to the invention there is provided a curtain suspension arrangement comprising a rail having a transverse flange forming the top portion thereof and a plurality of hook-gliders each comprising a rail engagement portion adapted to engage over and run smoothly along the transverse flange of the rail, and a hook portion adapted to support the upper edge portion of a curtain, the rail engagement portion having a front guide portion adjacent the hook portion and adapted to engage the front edge of the flange and a rear guide portion remote from the hook portion and

adapted to engage the rear edge of the flange, the flange and the rail engagement portion of each hook-glider being such that the hook-glider is constrained against movement within a plane perpendicular to the longitudinal axis of the rail solely by the flange and the rail engagement portion.

The hook portion of each hook-glider may comprise one or more prongs.

A hook-glider of a curtain suspension arrangement in accordance with the invention may be of small dimensions and at the same time may provide a hook portion which is at a level substantially above the lower edge of a rail on which the hook-glider is to run. Each hook-glider may be formed of resilient plastics material.

An advantage of a curtain suspension arrangement according to the invention when the hook-glider is formed of resilient plastics material is that it is a simple operation to mount a curtain on a rail by first of all engaging a series of hook-gliders in the upper region of the curtain, for example, on a conventional heading tape, and then engaging the rail engagement portion of the hook-glider over the top edge of the rail. The weight of the curtain will in many cases be sufficient to clip the hook-glider into its desired location.

An embodiment of the invention will now be described by way of example only with reference to the accompanying drawings in which:—

Figure 1 is a perspective view of a portion of curtain rail, and

Figure 2 is a section through the curtain rail of Figure 1 supported on a wall mounting bracket, also showing a combined hook-glider supported on the rail.

The rail 15 shown is an elongated member which is formed as an extrusion of a plastics material which is such that the rail is capable of being bent as will be described hereinafter. The rail 15 comprises a generally upright portion 11, a glider support means constituted by an inclined transverse flange 12 and a mounting means constituted by a dovetail member 13. The flange 12 is inclined downwardly and

rearwardly (Figure 1 shows the rear side of the rail) so that the small forward projecting part of the flange is not visually prominent when the rail is viewed from the front. The dovetail member 13 is disposed on the rear face of the generally upright portion 11 longitudinally of the rail so that the overall appearance of the rail when viewed from the front is generally flat but with a slight inclined forward projection at the top edge. The front surface 16 may be left plain as shown or alternatively may be decorated in any desired manner.

The dovetail member 13 in use is received in a dovetail recess 14 of a mounting bracket 25 (shown in Figure 2) to enable the rail to be mounted on a wall or similar support.

A suitable combined hook and glider 5, referred to herein as a hook-glider, for use with the rail 15 of Figure 1 is shown in position on the rail in Figure 2. This hook-glider incorporates a rail engagement portion constituted by a C-shaped limb 21 which engages over the flange 12 in order to constrain the hook-glider on the rail. The C-shaped limb forms a front guide portion which engages with the front edge of the flange 12 and a rear guide portion 20 which engages with the rear edge of the flange. In view of the inclination of the flange, the rear guide portion lies at a lower level than the front guide portion. The hook-glider is made of a plastics material which is sufficiently resilient to enable the hook-glider to be clipped into engagement with the flange 12 of the rail from above. The C-shaped limb 21 should, of course, be sufficiently open to permit this. The hook-glider also incorporates a downwardly depending portion 22 which when the glider is on the rail extends down in front of the rail. This downwardly depending portion 22 terminates in an upwardly directed hook portion 23 which is barbed at 30.

In use, the barbed hook portion 23 is engaged in a conventional curtain heading tape secured to the upper edge of a curtain. In this way, a series of hook-gliders as shown in Figure 2 spaced out along the upper edge of a curtain may be used to support the curtain from the rail shown in Figure 1. Nylon is a particularly suitable material for the hook-glider because it runs particularly smoothly on a rail of plastics material and enables curtains to be opened and closed smoothly and quietly with a very light effort.

The hook-glider is such that the hook portion is wholly above the level of the lower edge of the rail. At the same time, the root 40 of the hook portion which supports the main load of the curtains is below the level at which the hook-glider is supported on the rail so that the hook-glider will run smoothly on the rail without tending to tilt and jam. A reason why it is desirable to arrange for the hook portion to be at a high level is that this simplifies

the otherwise cumbersome task of supporting the curtains at a sufficiently high level to enable it to hide from view the rail and hook-gliders (or hooks and gliders as the case may be). With an arrangement as shown in the drawings it is possible to hide the whole of the rail and the hook-gliders when the curtains are closed by means of a conventional narrow heading tape on the top edge of the curtains engaged on the hook portions 23. When the curtains are opened, in the region between the curtains the only part that is visible is the front surface of the rail.

The rail shown in Figure 1 is constructed of a plastics material which is capable of being bent without breaking. If a gradual curve in the line of a curtain is required, this may be achieved by arrangement of a series of mounting brackets along the desired line of the rail and simply securing the rail to these brackets so that the rail takes on the desired curved form. Alternatively, if a sharp angle is required the rail should be firmly bent at the desired location of a bend and the material of the rail should be such that it does not spring back to the straight condition. The cross section of the rail tends to distort to a substantial extent at the locality of a sharp bend, for example, the flange 12 tends to become very nearly upright. However, the flange 12 does not become distorted to such an extent that it is impossible for a glider as shown in Figure 2 to run smoothly round the bend.

Although the invention has been described in detail with reference to a hook-glider for use with a glider support arrangement constituted by an inclined flange 12 inclined downwardly and rearwardly, the glider support arrangement and hook-glider may take various other forms, for example, the flange may be inclined downwardly and forwardly or it may be horizontal.

Our co-pending application No 9222/69 (Serial No. 1299732) is concerned primarily with the rail of the curtain suspension arrangement described above and our co-pending application No 33054/69 (Serial No 1289347) is concerned primarily with the mounting bracket of the curtain suspension arrangement described above.

WHAT WE CLAIM IS:—

1. A curtain suspension arrangement comprising a rail having a transverse flange forming the top portion thereof and a plurality of hook-gliders each comprising a rail engagement portion adapted to engage over and run smoothly along the transverse flange of the rail, and a hook portion adapted to support the upper edge portion of a curtain, the rail engagement portion having a front guide portion adjacent the hook portion and adapted to engage the front edge of the flange and a rear guide portion remote from the hook por-

rearwardly (Figure 1 shows the rear side of the rail) so that the small forward projecting part of the flange is not visually prominent when the rail is viewed from the front. The dovetail member 13 is disposed on the rear face of the generally upright portion 11 longitudinally of the rail so that the overall appearance of the rail when viewed from the front is generally flat but with a slight inclined forward projection at the top edge. The front surface 16 may be left plain as shown or alternatively may be decorated in any desired manner.

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- tion and adapted to engage the rear edge of the flange, the flange and the rail engagement portion of each hook-glider being such that the hook-glider is constrained against movement within a plane perpendicular to the longitudinal axis of the rail solely by the flange and the rail engagement portion.
- 5 2. A curtain suspension arrangement as claimed in claim 1 wherein each hook-glider is formed from resilient plastics material.
- 10 3. A curtain suspension arrangement as claimed in claim 2 wherein the rail engagement portion of each hook-glider comprises a limb of generally C-shape wherein the rail engagement portion can be clipped over a flange of a curtain suspension rail.
- 15 4. A curtain suspension arrangement according to any preceding claim wherein the hook

portion of each hook-glider is provided with a barb.

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5. A curtain suspension arrangement according to any preceding claim wherein the hook portion of each hook-glider comprises more than one prong.

6. A curtain suspension arrangement as claimed in claim 1 and substantially as described with reference to and as illustrated by the accompanying drawings.

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