PATENT SPECIFICATION

619,302

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COMPLETE SPECIFICATION

Improvements in or relating to Ornamental Hangings such as Curtains and Drapes

I, ANNETTE ELSIE FRIDOLPH, a Citizen of the United States of America, of 153, West 23rd Street, New York, State of New York, United States of America, 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 present invention relates to curtains, drapes and the like hangings and more particularly to the slidable support or suspension thereof from a supporting means such for example as a rail or track.

The present invention consists of a slider tape for supporting a flexible hanging such as a curtain, adapted to be attached permanently to and along the hanging, and which can remain attached to the hanging when it is washed or cleaned, said tape having permanently secured thereto at intervals therealong a plurality of slider members each consisting of a thin band or body portion connected at one end to and extending laterally from the tape and having at its other end a rigid head which is long in the direction of the tape and transversely narrow but of width greater than the thickness of said band or body portion whereby the thin bands or body portions are adapted to extend freely through a slit of co-operating track member and said heads to be received loosely in line on a longitudinal base of said track member communicating with said slit.

The said bands or body portions of said slider members may be flexible. Alternatively, said slider members may be formed of solid material such as plastic material and when appropriate the body portion may be bent at an angle between the tape and the head.

Each slider member preferably consists of a thin flexible fabric body portion which at its end remote from the tape extends around and covers a reinforcing element to form a head. Thus each slider element may consist of a short length of tape or other fabric material with a reinforcement at one end of stiff material such as metal which is covered by the tape or fabric to form a T-shaped head. It has been found that such a cloth surfaced head gives just the right sliding action of the heads in a suitable track; in other words, the transverse movement of the curtain, drape or the like is smooth and free and is not too jerky as is often the case when roller bearings and similar carrying units are used; furthermore, this smooth, easy sliding movement is noiseless.

The invention includes a flexible hanging such as a curtain having a plurality of slider members permanently secured directly thereto at intervals therealong instead of to said slider tape as set forth above.

The invention also includes the combination with a slider tape or flexible hanging as set forth above, of a track having a narrow slit in the face thereof opening into a wider longitudinal recess therein presenting a base or runway adjacent to the slit for the heads of said slider members, the combined cross section of the slit and recess being diminutive and approximately of T-form. By diminutive cross section I mean a cross section which is small and of a total depth of $\frac{3}{8}$" to $\frac{1}{2}$" and width across the head of the T of $\frac{1}{4}$" to $\frac{3}{8}$".

It has been found that the fabric covered heads of the slider members described herein afford just the right sliding action in the recess or slot of a supporting rail or the like; in other words, the transverse movement of the curtain is smooth and

[Price 2/-]

free and substantially noiseless and substantially without the jerkiness which is often the case with other forms of curtain supports.

A hanger construction or track suitable for use with the sliders of the present invention is described and claimed in my copending specification No. 20566/44 (Serial No. 619,215). Certain forms of the track claimed in my specification No. 20566/44 (Serial No. 619,215) are particularly described herein and illustrated in the accompanying drawings;

The invention is more particularly described with reference to the accompanying drawings, in which:—

Fig. 1 is an elevation of a conventional window frame provided with window curtains and drapes, the means for supporting the curtains and drapes not being visible.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1 and illustrating the manner of slotting the header members of the window frame to provide both a drapery traverse and a curtain traverse.

Fig. 3 is a fragmentary view of a portion of a length of curtain or drapery tape and slider assembly including the tape portion for connecting to the curtain or drapery and the like, and the slider portion for insertion in the combined curtain rod and moulding.

Fig. 4 is a view similar to Fig. 3 but illustrating the use of a different type of slider unit.

Fig. 5 is a view similar to Figs. 3 and 4 but illustrating the use of plastic slider units adapted to hold the curtain or like assembly a definite distance from the curtain rod.

Fig. 6 illustrates an assembly similar to Fig. 5, but showing the slider members shaped in position for vertical attachment.

Fig. 7 is a detail view of the slider member as used in the assembly shown in Fig. 6.

Fig. 8 is a sectional view illustrating a method of supporting the assembly unit shown in Fig. 5 in a combined curtain traverse and moulding, and also showing the preferred manner of attaching the same to a curtain or the like.

Fig. 9 is a sectional view of a conventional window frame assembly and one manner of using my combined moulding and curtain traverse to complete the window frame.

Fig. 10 is a sectional view of a slider member formed mainly of cloth with a reinforcing of metal.

Fig. 11 is a view similar to Fig. 10 but illustrating a single tape or body portion instead of a double portion as in Fig. 10.

Fig. 12 is an elevation of a combined curtain traverse and door moulding or head, showing a single slot and aperture for receiving slider members.

Fig. 13 is a sectional view taken on line 13—13 of Fig. 12.

Fig. 14 is a view similar to Fig. 13 but showing the aperture for receiving the heads of the slider members as a straight opening instead of an angular opening as in Fig. 13.

Fig. 15 is a cross sectional view taken through the aperture opening in Fig. 12, but illustrating a modified shape in cross section adapted to receive a clip member for use in cases where the header member is not closed at the end by other portions of the window framework and the like.

Fig. 16 is a fragmentary perspective view of a drape showing one of a plurality of slider members sewed thereto and a clip member for inserting in an aperture.

Fig. 17 is a view illustrating one manner of slotting the upper shelf of a kitchen cabinet whereby the shelf forms a traverse for the hanging of a curtain.

Fig. 18 is a view illustrating the method of assembly or removal of a typical drape provided with my slider members.

Referring to Figs. 1 and 2, standard window sashes are illustrated as at 11 and the window frame for carrying the sashes is shown as having a standard bottom member 12, a side member 13 and a header member 14. Instead of using a standard solid header member I have provided a relatively small T-slot 15 which extends across the length of the header member 14.

The curtain or other hanging member is supported directly by this small T-slot in the header member and, as shown in Fig. 1, this is accomplished by sewing slider members 16 directly to the top of the curtain 17, these slider members having enlarged head portions adapted to fit in and slide along the T-slot 15. This T-slot in many of the figures is shown relatively large, for purposes of illustration, and it will be understood that the T-slot is relatively small in cross sectional dimensions. It will thus be seen, in Figs. 1 and 2, that I have provided a wooden traverse member which forms an integral part of and completes the window frame. This construction not only eliminates curtain rods and fixtures, etc., but it renders unnecessary additional fixtures of any type because the curtain traverse is formed directly within the window header itself.

If it is desired to hang drapes, in addition to the glass curtains, I may provide a second slot in the window header 14 or,

as best shown in Figs. 1 and 2, I can provide a T-slot 18 in the window header trim 19. Slider members 16 may be sewed directly to the drapes 20 and such slider members fitted in the T-slot 18 will carry and slide the drapes along the window trim member 19 used as a traverse member.

The preferred form of slider member construction is best shown in Fig. 11, where the slider member 16 is shown as being formed of a length of cloth tape 21 which terminates in an enlarged header portion which is formed by means of a channelled member 22 which may be made of metal or other suitable material, and in which and around which is clamped and folded the end portion of the tape 21. In this manner the slider head is completely covered by fabric and the formed channel shaped metal portion 22 is permanently and securely fastened to the tape. In the modified form shown in Fig. 10, the structure is quite similar to that shown in Fig. 11, the most important difference being that the tape portion 23 is formed of a tube of fabric, into one end of which is inserted a piece of metal or other material 24 and then bent to the form shown so that the fabric is then folded within and covers the bent member 24. It will be understood that the header portions of the slider members may be reinforced in many different ways, such as by means of plastic or even short pieces of wood and the like, but in the preferred form such reinforcings are covered with cloth, as will be later explained.

The slider members 16 may be directly sewed to the top of the curtain, drape or the like, such as best shown in Fig. 16, at regularly spaced intervals, or these slider members 16 may be sewed to a length of tape 25, in which case the slider members 16 are equally spaced and the enlarged head portions 26 thereof are positioned uniformly in alignment. This complete unit may be purchased in given lengths and the tape portion 25 thereof sewed to the top of the curtain or drape. In Figs. 3 and 4 I have shown slider members of the preferred type having tape body portions 21 and enlarged head portions; the head portions 26a in Fig. 4 being shown as of greater length than those in Fig. 3, this being particularly desirable for use in heavy drapes, etc.

In Figs. 5 to 8 I have shown the slider members as being formed of plastic or similar material, the complete slider unit being designated 27 and having a body portion 28 and attached portion 29 preferably sewed to a tape member 25 of the same type shown in Figs. 3 and 4. The advantage of this type of slider member is best illustrated in Fig. 8 where the tape is shown sewed to the top of the curtain and the slider member 27 shown positioned in a T-slot of a wooden traverse member 30; it will be seen by using slider members of this type that the curtain or the like is positioned away from the traverse member. In Figs. 6 and 7 I have shown a plastic slider member 31 particularly adapted for use with a combined window header and traverse member, such as shown at 14 in Figs. 1 and 2.

In Figs. 9 and 12 to 15 I have shown a few of the different types and shapes of combined mouldings and traverse members which may be used in conjunction with the present invention. These and others are shown and claimed in my copending patent specification No. 20566/44 (Serial No. 619,215). In all cases I prefer to provide an aperture (as claimed in my copending specification No. 20566/44) (Serial No. 619,215) adjacent one or both ends of the slots formed in these combined mouldings or traverse members. One form of such aperture is illustrated in Figs. 12 and 13 wherein the combined moulding and traverse is indicated as at 32, the bottom of the T-slot as at 33, the narrow slot as at 34 and the aperture as at 35. In this modification the aperture is formed at an angle and is of such size to readily receive the enlarged header portion of the slider member. It will be understood that the slot 34 may be very narrow and, of course, need be only of such width as to accommodate the tape or body portion of the slider member. The aperture 35 is spaced by a short distance from the end of the moulding 32 so as to enable the end slider member of a curtain or the like to ride over the aperture and come to rest in a position beyond the aperture. Thus there will be little tendency for the slider member to pass inadvertently through the aperture 35.

The form of the moulding traverse shown in Fig. 15 has grooved portions 37 so formed as to receive a clip member which comprises an end plate (not shown) for covering the end of the T-slot, and side walls 41 for holding the clip member in place at the end or ends of a moulding.

A modified form of aperture for receiving the slider members is illustrated in Fig. 14, wherein the walls of the aperture are perpendicular to the plane of the moulding instead of being angular thereto as in Figs. 12 and 13. In Fig. 14 such aperture is designated 42 and its width is slightly less than the width of the base of the T-slot 33. In this arrangement of aperture and T-slot the end slider member normally moves over the aperture and it is not normally necessary to have any

closure member for the aperture after the insertion of the slider members. However, to insure that the slider will not accidentally be dislodged from the T-slot I have shown in Fig. 16 a springsnap member 43 having channel portions 44 of a width comparable to the width of the aperture 42 and embossed portions 45 adapted to fit in the ledge formed by the difference in width between the T-slot and the aperture. Instead of being sewn directly to the drape as shown in Fig. 16, such clip member may be sewn to the tape strap 25 as shown at 46 in Fig. 3, or may be formed on the end of a slider tape as shown at 47. In any case, it will be obvious that after all the slider members are inserted in position in the aperture at the end of the combined moulding and traverse and slid along the T-slot, the clip member 43 can be snapped in place in the aperture and thus will not only fixably position the end of the curtain or drape but will prevent the same being accidentally removed from the T-slot.

Not only can my combined moulding and traverse be used to do the double duty of providing a traverse as well as completing the window frame, but the idea of the combined moulding and traverse may be readily adapted to forming the header in an open doorway or dining alcoves, closets, storage spaces and the like. In Fig. 9 I have shown the traverse idea as incorporated in the top member of a standard window sash, the sash being shown as at 55 and the T-slot 56; such a T-slot is well adapted for receiving sliders attached to glass curtains. In this same Fig. 9 I have shown a modified form of window header frame as at 57 with the inner portion of this frame recessed as at 58 to readily provide for fastening means.

Other adaptations are illustrated in my copending patent specification No. 20566/44 (Serial No. 619,215).

In standard curtain rod assemblies or traverse members it is often necessary to provide anti-friction rollers or similar members to insure smooth, quiet movement, and it is frequently impossible to move drapes and curtains back and forth with such an arrangement without a jerky uneven movement. By providing cloth covered slider members 16 I have found that these slider members move very smoothly and with just enough friction against the walls of the T-slot to assure uniform quiet movement. The cloth surface provides not only an anti-friction surface to permit smooth, easy movement, but at the same time provides just enough friction to eliminate jerky movement and give quiet action.

Fig. 17 shows another adaptation of the invention wherein the top shelf 92 of a kitchen cabinet has grooved a small T-slot 93 for the reception of cabinet curtains 94 supported by slider members in much the same manner as the drape 20 in Fig. 2. The small exposed slot of the T-slot 93 does not detract in any way from the ornamental edge of the shelf 92 and by providing the aperture at the end of the T-slot such as shown in Fig. 14, it will be seen that the cabinet curtains may be easily inserted and removed for washing, and here again the standard shelf member performs a double duty with no additions such as brackets, rods and the like.

In Fig. 18 I have illustrated a method of assembly of a typical drape or curtain to a combined header and traverse member. The curtain 95 is shown as having stitched thereto a tape member 25 of the type illustrated in Fig. 3. Two of the slider members are already inserted in the T-slot 96 and the third slider member 16 is shown ready to be inserted into the aperture 42. As this aperture 42 is preferably of the type shown in Fig. 14, it will be obvious that normally the slider members when once inserted in the T-slot will slide back and forth past the aperture without slipping out through the same. To remove the curtains, as from the assembly shown in Fig. 18, the end slider member 16 is placed partially over the aperture 42 in the same position as when inserting, and the operator merely has to pull downwardly at an angle which tips the slider and starts removal of the curtain; subsequent sliders as they come along will be automatically tilted because of the down pull of the curtain. This method of insertion and removal is true of substantially all modifications disclosed in the drawings, with the possible exception of an aperture arrangement such as shown in Fig. 12 and in which case some kind of a stop must normally be used with the aperture or the end slider member would be continuously pushing through the aperture.

The use of cloth covered slider members such as shown in Fig. 11, Fig. 3 and Fig. 17, is very important in my unitary moulding and traverse combination in that it not only permits the use of a very small slot, so as not to detract from the ornamental appearance of the moulding and not to make it necessary to enlarge the cross sectional shape of the moulding, but also because of the cloth covering, the slider members work with a smooth, easy and non-jerky motion which is hard to appreciate until one actually has the feel from moving a curtain or drape equipped with my slider member. By sewing the

slider members or the slider tape to the top of the curtain or drapery, it makes the hanging or removal of curtains as easy for the housewife as plugging in a lamp. The thin cloth slider members make it possible for decorators to hang a single pair of ruffled curtains to a header member such as shown in Figs. 1 and 2, or to assemble a complicated window with glass curtains, drapery and valances all on a triple slot single moulding. The slider members being formed of cloth and sewed directly to the curtain or drape may be washed or cleaned together with the curtain or drape and this makes it unnecessary to detach the large number of hooks or retainer members usually necessary in removing curtains and drapes with the usual old type curtain rods and fixtures.

The combined header and traverse member as shown in Fig. 17 may also be of the type normally used as the ornamental header in Venetian blinds; in other words, the ornamental header member, in addition to covering up the top part of Venetian blind mechanism can be slotted as shown at 96 and curtains, drapes or blackout curtains hung by means of the slider members 26.

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:—

1. Slider tape for supporting a flexible hanging such as a curtain, adapted to be attached permanently to and along the hanging, and which can remain attached to the hanging when it is washed or cleaned, said tape having permanently secured thereto at intervals therealong a plurality of slider members each consisting of a thin band or body portion connected at one end to and extending laterally from the tape and having at its other end a rigid head which is long in the direction of the tape and transversely narrow but of width greater than the thickness of said band or body portion whereby the thin bands or body portions are adapted to extend freely through a slit of a co-operating track member and said heads to be received loosely in line on a longitudinal base of said track member communicating with said slit.

2. Slider tape as claimed in claim 1 in which said bands or body portions of the slider members are flexible.

3. Slider tape as claimed in claim 1 or 2 in which each slider member consists of a thin flexible fabric body portion which at its end remote from the tape extends around, and covers a reinforcing element to form a head.

4. Slider tape as claimed in claim 1 or 2 in which each slider member consists of a short length of tape or other fabric material with a reinforcement at one end of stiff material such as metal which is covered by the tape or fabric to form a T-shaped head.

5. Slider tape as claimed in claim 1 in which the slider members are formed of solid material such as a plastic material.

6. Slider tape as claimed in claim 5 in which the body portion of each slider member is bent at an angle between the tape and the head.

7. A tape which may be sewn or otherwise permanently secured to a hanging such as a curtain or drape and a curtain or drape embodying such a tape, as particularly described with reference to the accompanying Figures 3—7, 10 and 11.

8. A flexible hanging such as a curtain having a plurality of slider members permanently secured directly thereto at intervals therealong instead of to said slider tape as claimed in any of the preceding claims.

9. A flexible hanging such as a curtain or drape having spaced slider members permanently secured thereto as particularly herein described.

10. The combination with a slider tape or flexible hanging as claimed in any of the preceding claims of a track having a narrow slit in the face thereof opening into a wider longitudinal recess therein presenting a base or runway adjacent to the slit for the heads of said slider members, the combined cross-section of the slit and recess being diminutive and approximately of T-form.

11. The combination of a slider tape or flexible hanging with a slotted track as particularly described with reference to the accompanying Figures 1, 2, 8, 17 and 18.

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2. Slider tape as claimed in claim 1 in which said bands or body portions of the slider members are flexible.

3. Slider tape as claimed in claim 1 or 2 in which each slider member consists of a thin flexible fabric body portion which at its end remote from the tape extends around, and covers a reinforcing element to form a head.

4. Slider tape as claimed in claim 1 or 2 in which each slider member consists of a short length of tape or other fabric material with a reinforcement at one end of stiff material such as metal which is covered by the tape or fabric to form a T-shaped head.

5. Slider tape as claimed in claim 1 in which the slider members are formed of solid material such as a plastic material.

6. Slider tape as claimed in claim 5 in which the body portion of each slider member is bent at an angle between the tape and the head.

7. A tape which may be sewn or otherwise permanently secured to a hanging such as a curtain or drape and a curtain or drape embodying such a tape, as particularly described with reference to the accompanying Figures 3—7, 10 and 11.

8. A flexible hanging such as a curtain having a plurality of slider members permanently secured directly thereto at intervals therealong instead of to said slider tape as claimed in any of the preceding claims.

9. A flexible hanging such as a curtain or drape having spaced slider members permanently secured thereto as particularly herein described.

10. The combination with a slider tape or flexible hanging as claimed in any of the preceding claims of a track having a narrow slit in the face thereof opening into a wider longitudinal recess therein presenting a base or runway adjacent to the slit for the heads of said slider members, the combined cross-section of the slit and recess being diminutive and approximately of T-form.

11. The combination of a slider tape or flexible hanging with a slotted track as particularly described with reference to the accompanying Figures 1, 2, 8, 17 and 18.

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