May 3, 1960 W. C. WOOTTON 2,934,782

SLIDER FOR INSTALLATION OF CURTAINS

Filed Sept. 19, 1957

FIG. 1.

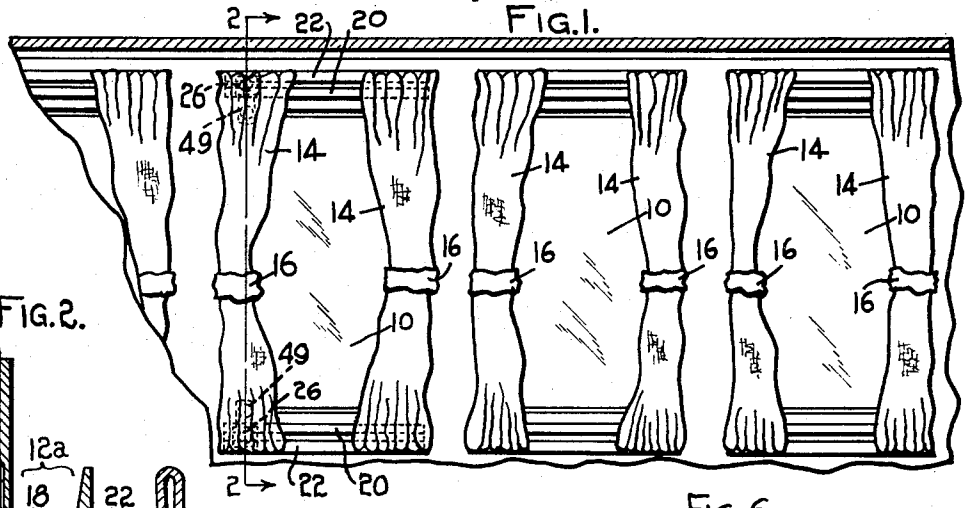


FIG. 2.

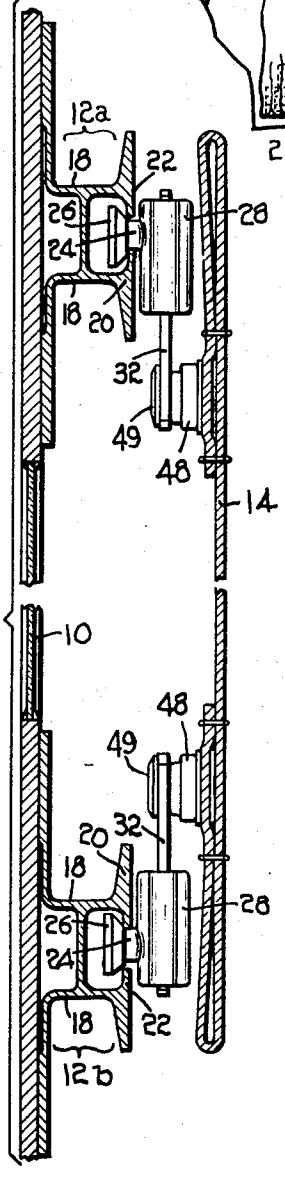


FIG. 4.

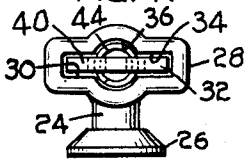


FIG. 3.

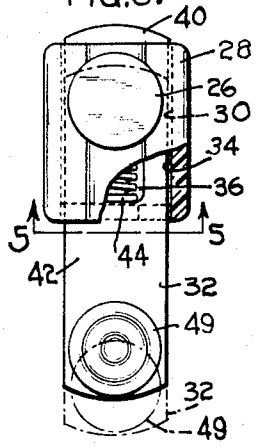


FIG. 5.

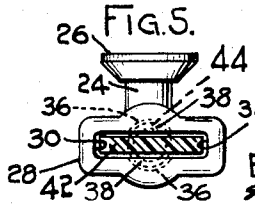


FIG. 6

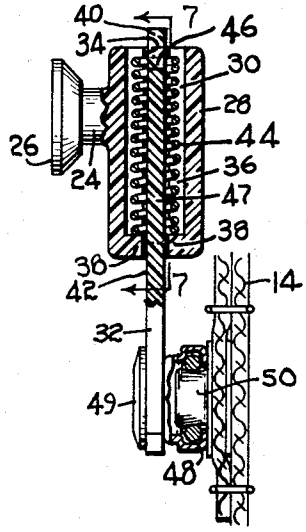
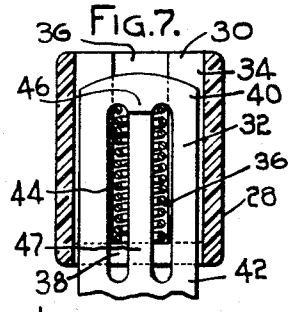


FIG. 7.



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SLIDER FOR INSTALLATION OF CURTAINS

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2 Claims. (Cl. 16—93)

This invention relates to installations on the walls of buildings and vehicles of decorative or utilitarian flexible panels such as curtains, the walls usually having windows, which installations are of the type wherein opposite edges of the panels are engaged with guideways which hold the panels extended but permit them to be moved in whole or in part in a plane parallel to the wall. The object is to provide an improved mounting element or "slider" for joining the panel edges and the guideways by use of which the desired effective installation in spite of structural incongruities between the panel and the guideways is realized in a superior manner, as will appear as the description proceeds.

The invention will be well understood by reference to the following description of an illustrative embodiment thereof shown in the accompanying drawings wherein:

Fig. 1 is an elevation of the interior of the wall of the body of a passenger carrying airplane exemplifying the invention. The figure is schematic and not realistic as to proportions;

Fig. 2 is a vertical section through a panel and its supports;

Fig. 3 is an elevation of one of the slider elements;

Fig. 4 is a top plan view thereof;

Fig. 5 is a section on the line 5—5 of Fig. 3;

Fig. 6 is a side view of the slider as seen from the right of Fig. 3, with part broken away; and

Fig. 7 is a section on the line 7—7 of Fig. 6, but showing the shank extended to the position shown in dotted lines in Fig. 3.

Referring now to Fig. 1 of the drawings, I have there shown schematically, as viewed from the interior, the wall of an airplane which wall is pierced by a series of windows **10**. Above and below the series of windows are top and bottom guideways **12***a* and **12***b* respectively, between which are extended curtain panels **14**. Herein a pair of curtains is provided for each window similar to so-called sash curtains, but secured at their top and bottom margins to the guideways. They may either be extended over the windows or drawn to one side to any desired degree, and are illustrated in the drawing as being shirred centrally and secured by tiebacks **16**.

Referring now to Fig. 2, each of the guideways may be formed by a suitable metallic molding having spaced flanges **18** with inturned margins **20** and **22** in the same plane. The edge of the inturned part **20** constitutes a rail or track on which the "sliders" to be secured run while the opposing part **22** is in effect a guard rail to hold them in position.

The sliders as seen in Figs. 3 through 7 include a cylindrical neck portion **24**, for riding on rail **20**, an inner head **26** and an outer body portion **28**. The head **26** which may be substantially conical as shown is received in the space between the flanges **18** and is of a diameter greater than the space between the inturned edges **20** and **22**, so that the slider is supported on track **20**. The head may be entered into the space between the flanges and behind the parts **20** and **22**, either from the end of the guideway or through a gateway formed at a suitable point in portions **20** and **22** in well known manner. The slider cannot be released by direct outward pull and the cooperation of the head **26** with the guard rail **22**, and of the body **28** with the outer face of rail **20**, prevents it from tipping to any considerable angle in a plane transverse to the wall.

In accordance with the invention a resiliently extensible connection is provided between a group of sliders and the adjacent panel edge along opposite sides of the panel for reasons hereinafter referred to. The drawings illustrate a preferred form of device for effecting such connection. The body extends laterally, viewing Fig. 4, of the neck portion **24** and is provided with a central chamber **30** (see Fig. 7) in which is resiliently suspended a shank **32** the projecting end of which is anchored to the curtain edge. Herein the body is of generally oblong cross section and pierced with an oblong slot **34** opening through the ends thereof as seen in Figs. 4 and 5. Along the longer walls of the slot are recesses **36** which do not extend through that end of the body which is the lower end viewing Figs. 3 and 5, so that shoulders **38** are provided at the front and rear of the slot **34**. The shank **32** is a generally similar oblong member fitting freely within the slot **34**. An opening through the upper end of the shank (see Fig. 7) defines upper and lower cross parts **40** and **42** respectively between which is received the helical compression spring **44**, one end of which will be supported by the shoulders **38** at one end of the chamber, the other end of which bears against the cross bar **40**. From the cross bars **40** and **42** integral tongues **46** and **47** may extend which enter the ends of the spring and serve to position it. The ends of these may closely oppose one another, as seen in Fig. 7.

Normally the spring retracts the shank portion **32** within the body to the position shown in full lines in Fig. 3, with its distal end projecting. This distal end is secured to the edge of the curtain but under strain it may be drawn outward from the body to the dotted line position of Fig. 3 and in full lines in Fig. 7.

The distal end of the shank is herein shown as provided with a snap-fastener socket **48** secured by a washer **49** adapted to cooperate with a stud member **50** secured to the edge of the curtain. The socket **48** is larger in cross section than the slot **34** and prevents withdrawal of the shank **32** from the body from the upper end in Fig. 3.

It is convenient to assemble the spring **44** with the shank **32** in the manner shown, insert the shank into the body from above and then apply the socket **48** to the distal end of the shank. The tongue **47** may easily be bent to one side to permit the spring to be engaged thereover.

The slider comprising the parts **24**, **26** and **28** and likewise the shank **32** may be, and preferably are, molded from nylon or similar form-retaining but resiliently flexible material.

The resilient connection of the curtain to the sliders facilitates mounting of the curtains and moving them to their desired positions along the guideways. As portions of the curtains are shifted, perhaps by a force applied to a vertical edge, the strains are equalized and the movement facilitated. Violent jerks or pulls occurring during the use of the curtains are cushioned and no breaking or tearing will result. If the guideways are not strictly parallel to the line of fastener studs, either because of some constructional feature of the installation, as for instance to adapt it to a wall having a slightly curved boundary, or because of inaccuracies in the installation of the guideways or of the studs **50**, the extensibility of the connecting means compensates. Shrinking or stretching of the

fabric in use or as a result of washing or cleaning is also compensated for.

I am aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and I therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, as is in fact clear in several matters from the description itself. Reference is to be had to the appended claims to indicate those principles of the invention exemplified by the particular embodiment described and which I desire to secure by Letters Patent:

1. A slider for connecting the edge of a curtain to a guideway comprising an outer or female element and an inner or male element, each a unitary molded unit, the relatively remote ends of said elements having means for connecting one to the guideway and the other to the curtain, the outer element having a vertical slot therethrough of generally oblong cross-section and having recesses in its wider side walls above its lower end to provide seats for the lower end of a helical spring, the sides of which are received in the recesses, the inner element comprising a shank of oblong cross-section to fit the slot, the shank being cut away to define upper and lower crossbars,

the inner element being movable upwardly to project the shank beyond the upper end of the outer element to expose laterally a considerable portion of the distance between said crossbars for the lateral introduction of the helical spring between them, the cross bars having projecting tongues to enter the ends of the spring.

2. A slider as set forth in claim 1 wherein the tongue on the lower crossbar is resiliently flexible laterally from the plane of the shank and its upper end normally lies closely adjacent to and in alignment with the tongue on the upper crossbar.

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