March 4, 1952 K. T. IRVING 2,588,243

SUSPENSION DEVICE FOR CURTAINS, DRAPERIES OR THE LIKE

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FIG. 1

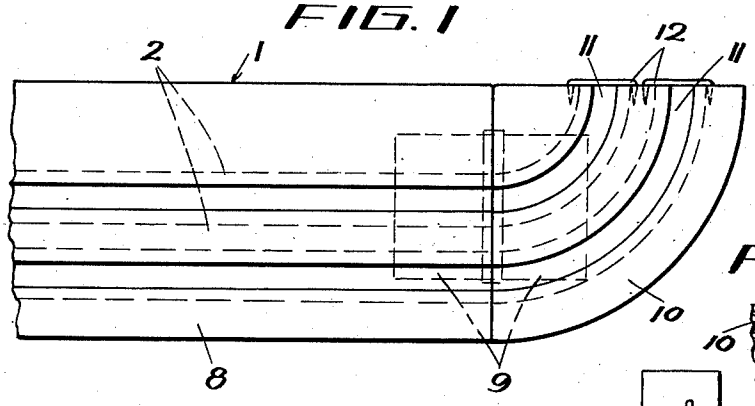
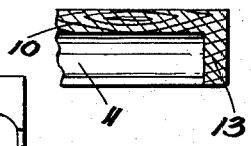


FIG. 3



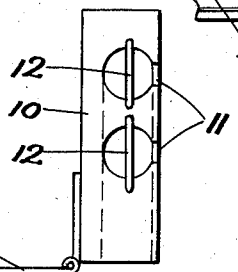


FIG. 2

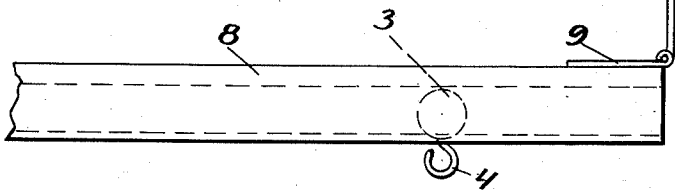


FIG. 5

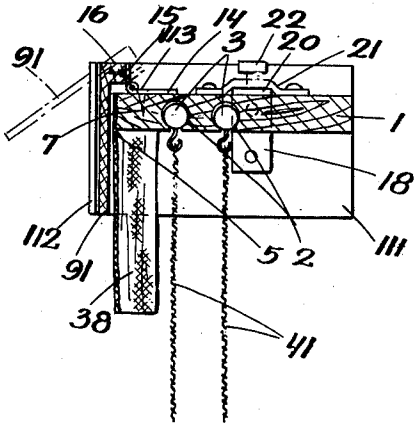
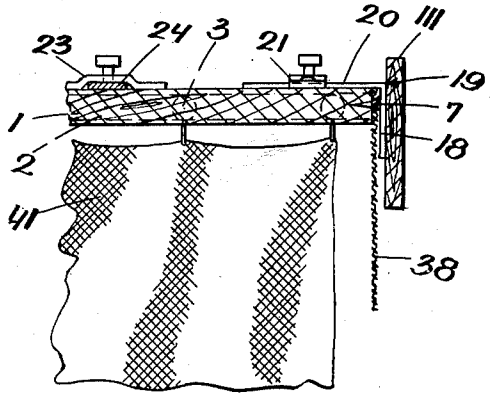


FIG. 6



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SUSPENSION DEVICE FOR CURTAINS, DRAPERIES OR THE LIKE

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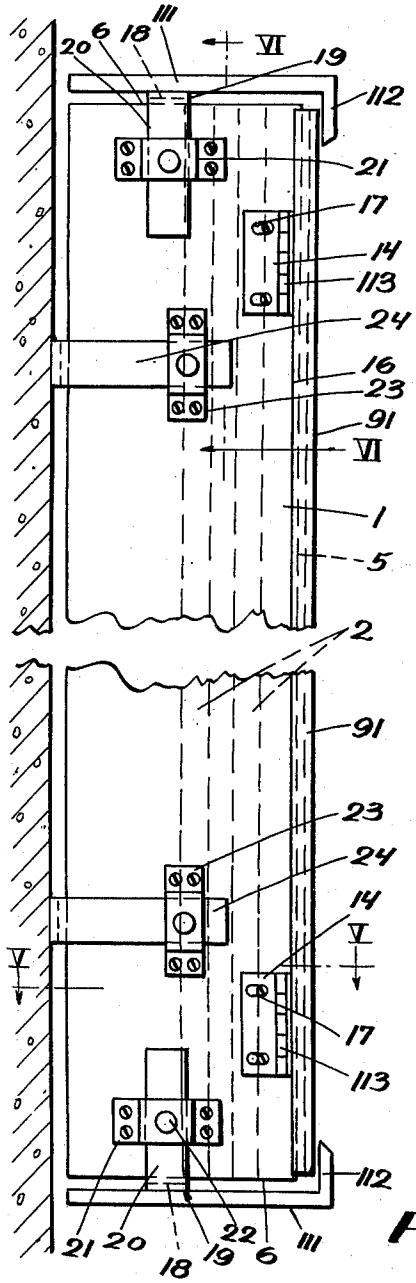

FIG. 4

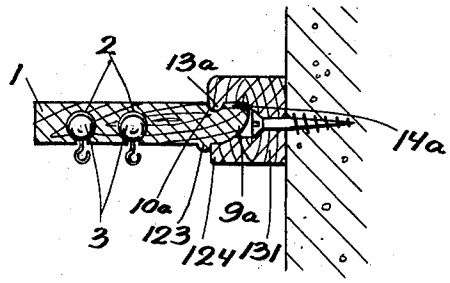

FIG. 8

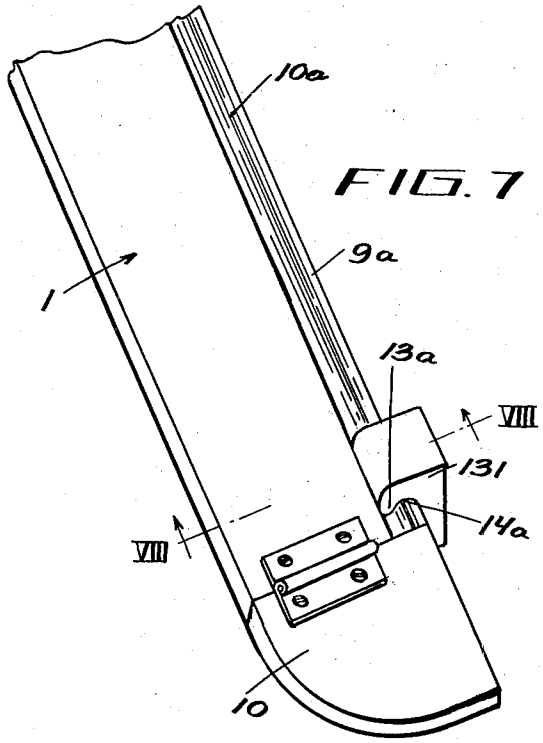

FIG. 7

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SUSPENSION DEVICE FOR CURTAINS, DRAPERIES OR THE LIKE

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FIG. 9

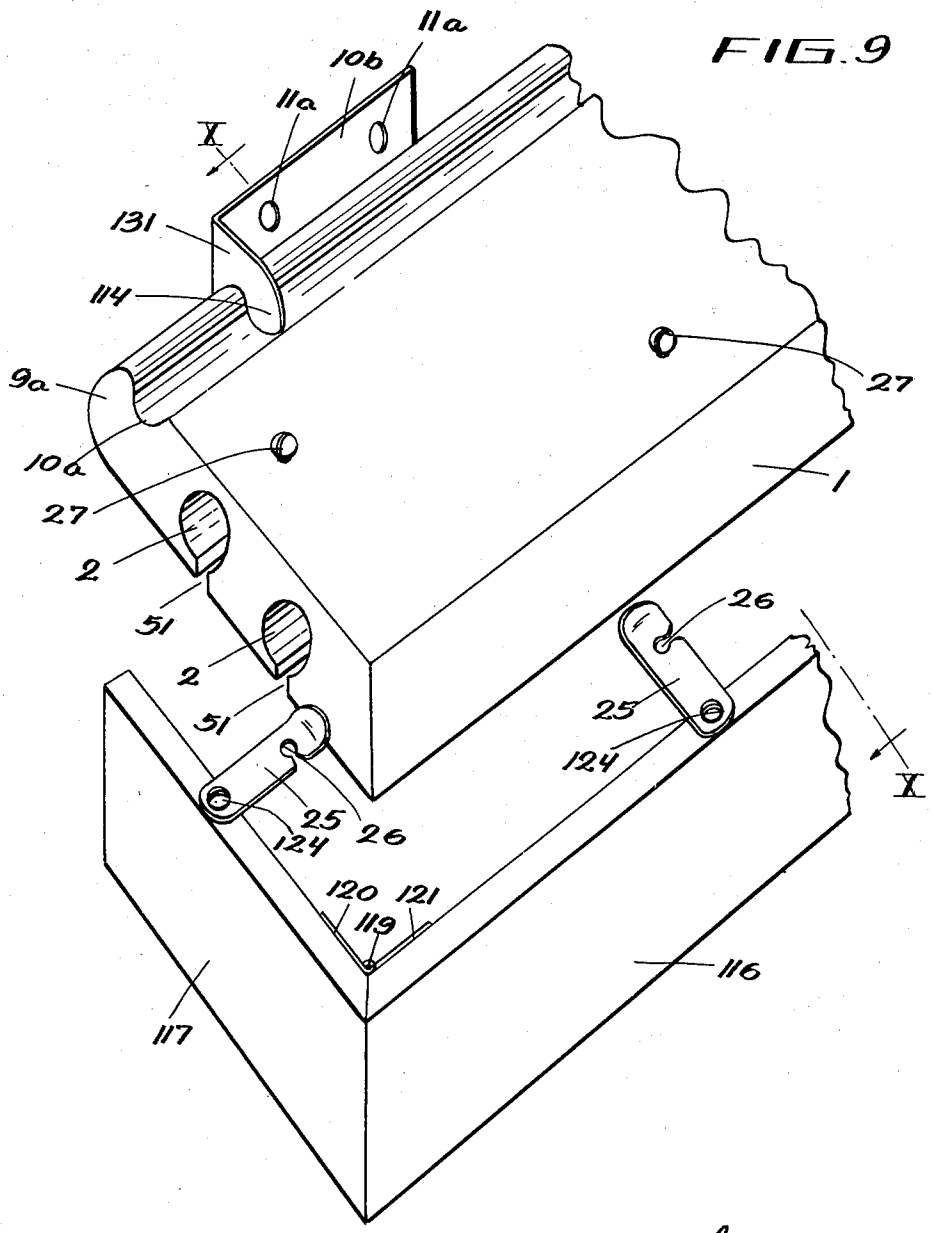

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FIG. 10

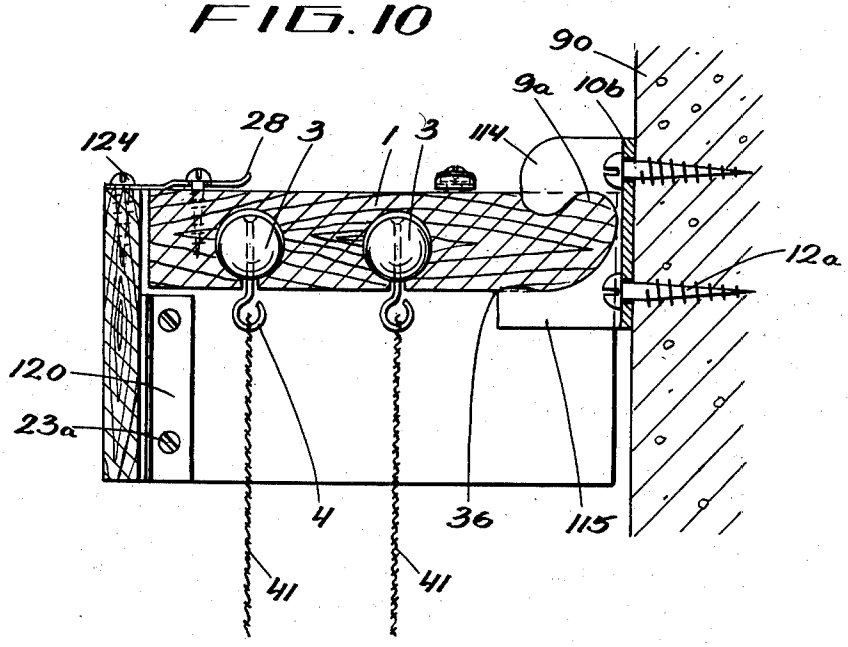
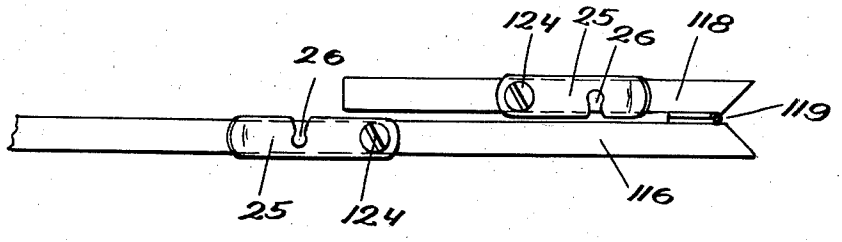


FIG 11



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Patented Mar. 4, 1952

2,588,243

UNITED STATES PATENT OFFICE

2,588,243

SUSPENSION DEVICE FOR CURTAINS, DRAPERIES, OR THE LIKE

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Application February 12, 1948, Serial No. 7,948
In Sweden February 11, 1939

Section 1, Public Law 690, August 8, 1946
Patent expires February 11, 1959

9 Claims. (Cl. 160—19)

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The present invention relates to improvements in suspension devices for curtains, draperies or the like such as curtain-boards or cornices or a combination thereof.

The main object of the invention is to provide a device of this character which comprises a pair of brackets and at least one intervening pole or cornice or board member having at least one channel extending longitudinally therethrough and opening into the bottom face of said member through a slit, said channels being adapted to receive sliding elements for carrying said curtains, and means for preventing said sliding elements from escaping out of said channels.

Another object of the invention is to provide a suspension device of the kind referred to having a curtain-board, in which foldable extension members are provided at one end, at least, of said curtain-board, said members being provided with arcuate channels curved towards the rear edge of said board and forming a continuation of said channels in said intervening member, and stop means closing the outer ends of said arcuate channels.

Another object of the invention is to provide a suspension device of the kind referred to and adapted to have a valance attached thereto, and comprising a curtain-board, two brackets and a front member detachably or movably attached to said board and adapted when applied in place to cover the points of attachment of said valance to the vertical front edge of said board, said board being further provided with end members detachably or movably attached thereto and adapted when applied in place to cover the points of attachment of said valance to the vertical end edges of said board.

A further object of the invention is to provide a suspension device of the kind referred to comprising a board member and at least two substantially U-shaped brackets for retaining said board in place, the bracket arms and the rear edge portion of said board being given such a complementary shape that the insertion of said portion into the gap between said bracket arms is enabled in a rearwardly and downwardly inclined direction, and said board is permitted to be rocked downwards into a substantially horizontal position only after said rear edge portion has been so inserted, whereby the upper face of said board abuts the upper arm of said brackets and the lower face thereof abuts the lower arm of said brackets, and said rear edge portion being in addition so shaped that the engagement of said brackets can take place in practically any point along the length of said board.

A further object of the invention is to provide

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a suspension device of the kind referred to comprising a board or pole having longitudinally extending channels therein for receiving sliding members for carrying said curtains, and a pair of brackets for supporting said board in place, the rear edge portion of said board being adapted to be inserted into the gap or recess formed between two projecting arms of said brackets, each bracket comprising a sheet metal plate bent to an angle, one flange of the bracket being formed as a fastening plate and the other flange of the same being forwardly directed and provided with said arms.

A further object of the invention is to provide a suspension device for curtains and the like comprising a curtain-board and a cornice detachably secured thereto and including two relatively short end members adapted, respectively, to cover one end edge of said board, and a relatively long front member hinged to said end members on hinge pins, respectively, which are vertically disposed when said cornice is applied in place, both said front member and said end members having substantially plane or flat rear faces, said hinge pins being disposed on the rear side of said cornice in the corners between said front member and said end members in such a manner as to cause said end members, upon folding said cornice together, to lie close upon the rear face of said front member and to permit no portion of said hinge connecting means to project below the bottom edge of said cornice.

Further objects and advantages of my invention will appear as the specification proceeds.

The preferred embodiments of my invention are illustrated in the accompanying drawings, in which:

Fig. 1 is a bottom plan view of relevant parts of a curtain-board according to one embodiment of the invention;

Fig. 2 is a side view of the same with an end section in perpendicular position;

Fig. 3 is a vertical section longitudinally through the end of one of the channels according to a slightly modified form of said embodiment;

Fig. 4 is a top view of a combined curtain-board and cornice according to a further embodiment of the invention;

Fig. 5 is a cross sectional view along the line V—V in Fig. 4;

Fig. 6 is an elevation view in longitudinal section along the line VI—VI in Fig. 4 rotated 90° clockwise;

Fig. 7 is a top perspective view of one end of a suspension device according to a further embodiment of the invention;

Fig. 8 is a cross-section along the line VIII—VIII in Figure 7;

Fig. 9 is an exploded perspective view of one end of a cornice-curtain board according to a still further embodiment of the invention;

Fig. 10 is a cross-section taken along the lines X—X of Fig. 9, the cornice being, however, shown as attached to the curtain-board; and

Fig. 11 is a broken top edge view of the cornice of Figs. 9 and 10 in its condition of being folded together.

Referring to Figs. 1–3 of the accompanying drawings, a curtain-board is shown comprising a pair of brackets (not shown), and an intervening member or board 8. The board 8 is, in a well-known manner, provided with channels 2 extending longitudinally therein and adapted to receive runners 3 provided with means such as hooks for carrying the curtains (not shown), said hooks projecting through a slit in the bottom face of said board 8.

At the ends of the main or middle member 8 of the curtain-board there are mounted extension members 10, respectively, which are attached thereto by means of hinges 9 or the like secured to the top face of said middle member 8. The extension members 10 are provided with substantially arcuate channels 11 forming a continuation of the channels 2 in said middle member 8. Stop means in the form of a cramp 12 or the like is provided at the outer ends of the channels 11 so as to prevent the runners 3 from escaping out of said channels. Advantageously said stop means, however, may consist of the end wall which is obtained if, in the operation of forming the channels 11, a portion 13 (see Fig. 3) of the material is left unbroken at the free end of the extension member 10.

For mounting the curtain it is only necessary to flap the extension members upwards, whereby the runners 3 can be conveniently slipped into the mouths of the channels 2 which are thereby exposed. After having rocked the extension members down again some of the runners may be slid into the channels 11 from where they are prevented from being dropped by the stop means 12 or 13, respectively.

Referring to Figs. 4 to 6 of the drawings, when using a valance in association with curtain-boards, cornices or like suspension devices for curtains, draperies and the like, it is common practice to attach said valance at its upper edge to the front and side edges of the curtain-board by means of drawing-pins or by other suitable fastening means. Since these attached edges of the valance will be visible from the interior of the room the valance will have to be fastened with a high degree of care in order not to deteriorate the general appearance of the curtain or drapery arrangement, and therefore it may be found necessary in certain cases to resort to skilled assistance which, of course, involves an extra expense.

The disadvantage just mentioned, according to the embodiment illustrated in Figs. 4 to 6, is wholly eliminated in that the attached edge of the valance simply is not made visible as it is arranged to be covered by a cornice or like means.

In Figs. 4 to 6 of the accompanying drawings a curtain-board is shown at 1 as provided, as before, with two longitudinally extending channels 2 with circular cross-section. From the ends of the board 1 there are inserted into the channels 2 a number of runners 3 provided with

hooks or the like for carrying the curtains, draperies or the like 41. A valance 38 is, in a well-known manner, secured at its upper edge to the vertical front and side edges 5 and 6, respectively, of the board 1 by means of drawing-pins 7. After attaching the valance 38 the front edge thereof secured to the board 1 is covered by letting down a front member 91 or cornice secured to the board 1 by means of hinges 113. The attached side edges of the valance are each covered by an L-shaped end member 111 slidingly adjustable endwise of the board 1. One flange 112 of the L-shaped member is adapted to cover the front surface of the ends of the front member 91 when the latter is in its let-down position. The outer surfaces of the end members 111 are preferably similarly formed as the front surface of the front member 91.

In this embodiment the hinges 113 have one leaf 14 thereof secured to the top face of the board 1 adjacent the front edge 5 thereof, the other hinge leaf 15 being secured to a rib or the like 16 mounted on the inner face of the front member 91 adjacent to the top edge thereof. Advantageously the holes 17 for the fastening screws of the hinges 113 should be elongated in order to make it possible, by adjusting the hinge leaves 14, to vary the clearance between the vertical front face 5 of the board 1 and the front member 91 to thereby provide for the attachment of valances 38 of different thicknesses.

The adjustment of the end pieces 111 longitudinally of the board 1 is enabled owing to the fact that one flange 18 of an angle iron 19 is attached to the inner surface of the associated end member 111, the other flange 20 being slidable in a guide member 21 secured to the top face of the board 1 and comprising a substantially U-shaped sheet metal plate provided with fastening lugs. The end members 111 are, by means of a set-screw 22 in each of the guide members 21, settable in an adjusted position relative to the board. The board 1 is in this instance provided with brackets 24 in the form of angle irons one flange of which is attached to the wall and the other flange of which is adjustable and settable in guide members 23 mounted on the board 1.

Also, in this embodiment, the end members 111 serve as stop members to limit the lateral displacement of the curtains 41, in that the runners 3 are thereby prevented from slipping out of the channels 2 at the ends of the latter.

The curtain-board may or may not be provided with a valance. In the latter case the front member 91 and the end members 111 will cover the front and end edges of the curtain-board.

Referring to Figs. 7 and 8 of the drawings, a suspension device is shown comprising a curtain-board 1, end members 10 hinged to said board, and a pair of brackets 131 (only one of which is shown) for mounting the curtain-board 1, 10. As in the preceding embodiments the curtain-board is provided with longitudinally extending channels 2 for receiving runners 3 having means for fastening the curtains. The end members 10 are, as usual, provided with rounded continuations of said channels and also with stop means for limiting the movement of said runners.

The front portion of the curtain-board 1 may be given any suitable shape, and the brackets 131 are of the shape specified in the foregoing as having a recess 14*a* and a lip 13*a* projecting down into said recess from the front portion of

said bracket. According to this embodiment of the invention a longitudinally extending groove 10*a* is provided in the upper surface of the board, and the portion 9*a* of the board situated to the rear of and below the rear edge and said groove 10*a* is given a shape corresponding to the recess 14*a* in the brackets 13*l*, whereby the said edge portion 9*a* can be inserted from in front into said recess 14*a*, and said lip 13*a* is caused to engage said groove 10*a* in the board.

In Fig. 8 the board 1 is shown as having on its bottom face a longitudinally extending lip or shoulder 123 which, when the board is mounted in place, engages the front edge 124 of the brackets 13*l* below the recesses 14*a* thereof. This will materially decrease the stress to which the brackets are subjected, and there will be no risk of pressing apart and breaking the two arms of the brackets embracing the recess 14*a*, upon loading the board with heavy draperies, for example. It is to be understood, of course, that the groove 10*a* need not necessarily extend along the entire length of the curtain-board.

Referring to Figs. 9 to 11, a suspension device is shown comprising a curtain-board 1, recessed brackets 13*l* for holding the board when mounted in place, and a cornice or like member 116, 117 to be described later. The shape of the bracket recesses and of the rear edge portion of said board is such as to enable the insertion of said portion into said recesses to be performed in a rearwardly and downwardly inclined direction, and not to permit the board to be rocked into its substantially horizontal position until after said board has been so inserted. According to a previously proposed construction said brackets are made of wood. In order to obtain the required rigidity the thickness of such wooden brackets, however, will have to be fairly great. This will result in a rather large clearance between the rear edge of the curtain-board and the wall to which the brackets are attached. Such clearance is objectionable as it will admit daylight onto the wall surface above the curtain-board. It is an object of this invention to eliminate this disadvantage. To this end, according to the embodiment illustrated in Figs. 9 and 10, each bracket 13*l* comprises an angularly bent sheet metal piece one flange whereof 10*b* is formed as a mounting plate, and the other, forwardly extending flange whereof is provided with the aforesaid recess. The bracket flange 10*b* is provided with holes 11*a* for the fastening screws 12*a*. The recess has a shape complementary to the rear edge portion 9*a* of the curtain-board 1, and is formed between the two arms 114 and 115 of the forwardly projecting bracket flange. At the forward end of the lower arm 115 there is provided a slightly upwardly projecting extension 36. When the curtain-board has been inserted with its rear edge portion 9*a* into the recesses and thereafter rocked into its horizontal position, then, due to the weight of the board and curtains, the said extension 36 will engage the bottom face of the board and thereby prevent any endwise displacement of the same.

In the Figs. 9 to 11 there is also illustrated an improvement in a cornice or the like for a curtain-board and comprising a front member 116 and two end members 117. The cornice is adapted to be removably attached to said curtain-board 1, and the end members of said cornice are foldably connected with said front member. The curtain-board 1 is provided with the two longitudinally extending channels 2, as before,

adapted to receive a number of ball-shaped or cylindrical runners 3 which are slidable along said channels 2 and each provided with a downwardly projecting hook or the like 4 passing through a slit 51 arranged in the bottom face of the curtain-board 1, and adapted to carry the curtains 41 or the like.

In the top surface of the curtain-board 1 there is provided adjacent the rear edge thereof a longitudinally extending and comparatively shallow groove 10*a* the front edge of which is given a slightly steeper slope than the rear edge thereof. In addition, the upper rear edge of the curtain-board 1 is rounded so as to form a torus-like projection 9*a*. The lower rear edge of the board 1 is rounded, as well, but its rounding has a larger radius of curvature than has said torus-shaped projection 9*a*. As mentioned above the brackets 10*b* are in the form of angle irons the forwardly projecting flanges whereof are provided with a recess complemental in shape to said groove 10*a* and said torus-like projection 9*a*.

The front member 116 of the cornice is adapted to cover the front edge of said curtain-board 1, and the two end members 117 and 118 are adapted, respectively, to cover the end edges of said board. The member 116 is foldably connected with said end members 117, 118 by means of hinges. The pin of one hinge is shown at 119 and its leaves at 120 and 121, respectively. At 23*a* fastening screws for attaching the hinge leaves to the cornice members are shown.

In the top edges of the cornice members 116, 117, 118 there are provided one or more screws 124 serving each as a pivot pin for an arm 25 preferably of a suitable resilient material and being provided at one of its longer edges with a recess 26 adapted, when the cornice is to be locked to the curtain-board, to be engaged by a screw 27 threaded into the top surface of the curtain-board. The resilient arms 25, as is indicated in Fig. 10, may be offset from the top face of the curtain-board so as to cause the same to be pressed against the under-side of the heads of said screws 27, and further they may be provided at their free ends with a lug 28 in order to facilitate their manipulation. Among the advantages of this suspension device may be mentioned that, for transport purpose, the cornice may be readily released from the curtain-board and be so folded together as not to be exposed to the risk of being damaged.

While I have shown and described only some specific embodiments of my invention, I wish to have it understood that various changes or modifications may be made therein within the scope of the claims hereto attached without departing from the spirit of the invention.

What I claim and desire to secure by Letters Patent is:

1. In a suspension device for curtains having a curtain-board and a bracket, an extension member at an end of said board, at least one channel extending longitudinally through said board, said board having a slit between said channel and the bottom surface of said board, a plurality of sliding elements in said channel, a fastener for carrying said curtains on each sliding element, an arcuate channel in said member, said arcuate channel being curved towards the rear edge of said board and forming a continuation of said channel in said board, and stop means closing the outer end of said arcuate channel in said extension member, said extension member being movable relatively to the curtain-board into a position in

which the space between the end of the channel in the board and the adjacent end of the channel in the extension member is in excess of the corresponding dimensions of a sliding member thereby facilitating the insertion of the sliding members in the channels.

2. In a device as claimed in claim 1, said stop means being formed by an end wall of said arcuate channel in said extension member and consisting of a portion of the material of said extension member left unbroken at the free end of said member when forming the channel therein.

3. In a suspension device for curtains comprising in combination a curtain-board, a bracket therefor, and a cornice member attached to the front edge of said board which when applied in place extends over the vertical front edge of said board, an end member movably attached to said board which when applied in place has one part covering the front surface of said cornice member at an end of the latter, said end member being independent of said bracket and movable with relation thereto while said bracket supports said board.

4. In a suspension device as claimed in claim 3, and in which said end member is L-shaped, one flange of the L-member overlapping the front surface of said cornice member when applied in place.

5. In a suspension device as claimed in claim 4, and in which said cornice member is swingable relatively to said board, and said end member being adjustable longitudinally of said board.

6. In a suspension device for curtains comprising in combination a board member a U-shaped supporting bracket for said board, the space between the arms of the bracket receiving the rear edge of said board when applied in place, a lip on the front portion of said bracket and projecting into the space between said arms of the bracket, a longitudinal groove in one of the faces of said board member near the rear edge thereof, said rear edge portion having a shape complemental to said space between the arms of said bracket whereby said rear edge portion of said board can be inserted from in front into said space, and, when said board is applied in place, said lip engage said groove in said board.

7. In a suspension device for curtains comprising in combination a board member and a U-shaped supporting bracket for said member, at least one channel extending longitudinally through said board, a plurality of sliding members in said channel for carrying said curtains, the space between the arms of said bracket receiving and retaining the rear edge of said board, after insertion of the rear edge portion of said board into said space in said bracket, said rear edge of said board and the space between the arms of said bracket being generally curved and complemental in shape for facilitating joining thereof and angular displacement of said board into a substantially horizontal position, said bracket comprising a sheet metal plate bent to right angles, one portion of said bracket being formed as a mounting base, and the other portion forming said arms.

8. In a suspension device as claimed in claim 7, and in which the rear end of said space between the arms of said bracket is situated in close proximity to said mounting base whereby the rear edge of said board will be in close proximity to a wall mounting said suspension device.

9. In a suspension device for curtains comprising in combination a pair of brackets, a curtain-board carried by said brackets; a cornice member detachably secured to said board, said cornice comprising two relatively short end members, when in place covering one end edge of said board, respectively, and a relatively long front member hinged to said end members, the pins of said hinges being vertically disposed when said cornice is applied in place, both said front member and said end members having substantially plane rear faces, said hinge pins being disposed on the rear side of said cornice in the corners between said front member and said end members.

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