ABSTRACT

A window draw drape adapted to be supported in the manner of a vertical blind and having alternate light impeding and light transmitting vertical sections, the light impeding sections being supported for linear and rotational movement about respective vertical axes. The light impeding sections may be selectively rotated to positions to permit the transmission of light through said light transmitting sections or to positions wherein the light impeding sections overlap each other and substantially block the transmission of light through the drape.

9 Claims, 10 Drawing Figures
BACKGROUND OF THE INVENTION

The present invention relates to a window drape which combines the most desirable features of a vertical type window blind and a conventional window drape. The use of adjustable louver type vertical blinds is known and such blinds are exemplified in U.S. Pat. Nos. 2,822,305; 2,828,871; 2,844,199; 3,038,534 and 3,061,058. Correspondingly, draw drapes have been in use for a great many years and are preferred by many users over the vertical blinds for esthetic reasons. Manifestly, vertical window blinds while highly functional lack desired esthetic qualities inherent in window coverings formed of a soft fabric capable of being draped in a variety of ways.

SUMMARY OF THE INVENTION

One of the objects of my invention is the provision of a window drape which combines the desirable characteristics of both a louver type vertical blind and a conventional window drape, affording the adjustable light transmission features of a louver blind while retaining the highly esthetic characteristics of a soft draped window covering.

Another object of my invention is the provision of a window drape of the foregoing character which is simple in construction, efficient in operation and affords a highly esthetic appearance.

Other and further objects and advantages of my invention will become apparent from the following description when considered in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a fragmentary rear perspective view of the window drape of my invention detached from the supporting traverse means and disposed in a draped open position.

FIG. 2 is a fragmentary front perspective view of the window drape shown in FIG. 1.

FIG. 3 is a fragmentary rear perspective view of the window drape, in closed position.

FIG. 4 is a fragmentary front perspective view of the window drape, in closed position.

FIG. 5 is a fragmentary front perspective view similar to FIG. 2 of a modified embodiment.

FIG. 6 is a front rear elevational view of the window drape shown in FIG. 5, in closed position.

FIG. 7 is an enlarged fragmentary rear elevational view of a detail of the window drape shown in FIG. 1; and

FIG. 8 is a similar view showing the parts in separated relation.

FIG. 9 is a front elevational view of an embodiment of my invention mounted on a window opening and extending across the opening.

FIG. 10 is a similar view showing the window covering in retracted position.

BRIEF DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIGS. 1-4, the drape 15 of the present invention is shown detached from conventional support means 27 shown in FIGS. 9 and 10 employed with vertical blinds for providing both rotational and traversing movement of the louvers of the blind. Such support means are exemplified in U.S. Pat. Nos. 3,038,534 and 3,061,005. The drape 15 of my invention comprises a fabric panel 16 formed of a suitable open type weave affording a relatively high degree of light and air transmission yet providing desired privacy. The upper end of the panel preferably, is folded over upon itself and stitched to provide an upper hem 17 which is coextensive with the width of the panel. Suitably secured to the hem 17, at spaced intervals, on the surface corresponding to the inner face of the panel, are a plurality of pairs of snap fastener elements 19. The lower edge of the panel 16 also is reversely bent and stitched to provide a lower hem 21 and attached to said hem, at spaced intervals, are a plurality of fabric tape sections 22 which are stitched to the hem 21 only at their end portions, with the intermediate portion of each tape section between the attached ends being free of the panel. The tape sections 22 are disposed in vertical registration with corresponding snap fastener elements 19.

A plurality of louvers 23 formed of suitable moderately rigid opaque or semi-transparent material are provided, each having a length substantially equal to the vertical length of the fabric panel 16 and having a width sufficient to effect overlapping of adjacent louvers when the same are rotated to closed position, in a manner well known in the art. Each louver 23 is provided with a pair of complementary fastening elements 24 arranged to cooperate with the fastening elements 19. The lower end of each louver 23 may be tapered along the side edges to facilitate insertion into the space between the panel 16 and a tape section 22. Thus, as will be seen in FIG. 1, when the louvers 23 are assembled with the panel 16 there results a drape having alternately generally rigid opaque sections A, each pair of adjacent sections A being separated by a flexible light transmitting section B and C. It will be understood that this alternating arrangement extends fully across the width of the drape. Attached to the upper edge of each of the louvers 23 is a conventional hanger 26 which is adapted to be attached to a cooperating attaching element depending from each of the carriages in the conventional traversing support means 27.

By manipulation of conventional control means 50, the drape 15 may be extended fully across a window opening to assume substantially the condition illustrated in FIG. 1 in which the louvers 23 are in spaced parallel relation, with the spacing between adjacent louvers at a predetermined maximum for the operation of particular traversing support means. Additionally, the panel fabric 16 extends between adjacent louvers 23 to both the outer and inner edges of the louvers 23 so that the outer panel sections C are disposed in coplanar arrangement, with the inner panel sections B also being coplanar and disposed in parallel relation to the outer panel sections C. When the drape is arranged as illustrated in FIG. 1, light and air may pass through the parallel panel sections B and C to afford maximum light transmission and ventilation.

It will be understood that the drape 15 may be manipulated by conventional control means 51 to extend the drape or to collapse it. In the latter position the louvers 23 are disposed in side stacked relation with the flexible panel sections B and C being folded, each substantially along a median line. In such condition the drape
occupies a minimum of space along one side of a window opening to allow the widest possible view.

Each of the louvers 23 is rotatable substantially 180° so that when the louvers are rotated from the fully open position illustrated in FIG. 1 to the fully closed position illustrated in FIG. 3, the edges of adjacent louvers 23 overlap to completely preclude the transmission of light through the drape. As illustrated in FIG. 3 in such position only alternate louvers 23 are exposed to view from the rearward side of the drape, there being alternate sections of panel fabric B exposed to view between said alternate louvers 23. On the forward side of the drape, as illustrated in FIG. 4, only the panel fabric is exposed to view. Preferably, the width of each fabric panel section B or C is approximately equal to the width of each louver 23 and also approximates the maximum distance adjacent louvers when in fully extended condition, as illustrated in FIG. 1.

It will be understood that the louvers 23 may be rotated in either direction, clockwise or counter clockwise, from a fully open position and may be arrested at any intermediate position to regulate the amount of light desired to be transmitted through the drape.

It will be understood also that conventional sill positioned means 27a substantially identical to the upper traversing support means 27 may be employed to stabilize the lower end of each louver, in a manner well known in the art.

In the modified embodiment illustrated in FIGS. 5 and 6, the generally rigid vertically extending louvers are eliminated and instead a fabric panel 31 having alternate vertical sections of fine and coarse mesh 32 and 33, respectively is employed, the fine sections 32 while not generally opaque providing a rather effective barrier to the transmission of light therethrough. The upper edge of the panel 31 preferably, is reversely folded and stitched to form an upper hem 34. Attached to said hem are a plurality of stiffening members 36, each in registration with a respective fine mesh section 32. It will be understood that the stiffening members 36 may be permanently or removably attached to the panel. Preferably, the width of each fine mesh vertical section 32 corresponds substantially to the width of each louver 23 in the first described embodiment. Also, the width of each coarse mesh section 33 corresponds substantially to the width of the sections B and C in the first described embodiment.

The lower edge of the panel 31 is reversely folded and stitched to provide a lower hem 37. Preferably, a plurality of stiffening members 38 identical to the members 36 are attached to the lower hem 37 in vertical registration with the upper members 36. Both the upper and lower members 36 and 38 are provided with conventional connecting means 39 for attachment to the carriage assemblies of the conventional upper and lower support means hereinbefore described.

As in the first described embodiment, the fine mesh sections 32 may be rotated substantially 180°, in both clockwise and counter clockwise directions. When in open position, as illustrated in FIG. 5, the coarse mesh sections 33 are disposed as shown so as to admit a maximum of light therethrough. When in closed position the fine mesh sections 32 are rotated so that the edges thereof, overlap adjacent fine mesh sections to impede the transmission of light, exactly as in the first described embodiment.

From the foregoing it will be apparent that I have provided a novel drape which affords the advantages of vertical louver construction combined with the esthetic qualities of a conventional drape.

Various changes coming within the spirit of my invention may suggest themselves to those skilled in the art; hence I do not wish to be limited to the specific embodiment shown and described or used mentioned, but intend the same to be merely exemplary, the scope of my invention being limited only by the appended claims.

I claim:

1. In combination with an apparatus for supporting and controlling the rotary and linear movement of a window covering including an elongated horizontal mounting member having a plurality of carriages movably supported thereon, each of said carriages having a rotatable depending supporting member and a vertical louver depending from each supporting member, first control means for effecting linear movement of said carriages and louvers longitudinally of said mounting member and second control means for effecting simultaneous rotary movement of each of said supporting members and louvers, each about a respective vertical axis, the improvement in said window covering which comprises a unitary flexible drape panel secured to said carriages at spaced intervals at least along the respective top edges thereof to provide alternate generally stiff and generally flexible panel sections with the planar surfaces of said drape panel and louvers being contiguous, said first and second control means being manually operable to selectively move said carriages and louvers to open light transmitting position wherein said generally stiff panel sections are arranged in parallel relation normal to the longitudinal axis of the mounting member and spaced from each other longitudinally of the mounting member, with the flexible panel sections between adjacent louvers being disposed alternately on opposite sides of the longitudinal axis of the mounting member in draped configuration, said first and second control means being operable to selectively move said carriages and louvers to closed light impeding position wherein said generally stiff panel sections are disposed in overlapping generally co-planar relationship and generally parallel to the longitudinal axis of the mounting member.

2. The invention as defined in claim 1 in which the louvers extend substantially the full vertical length of said panel.

3. The invention as defined in claim 1 in which the louvers operate to impede the transmission of light.

4. In combination with an apparatus for supporting and controlling the rotary and linear movement of window covering including an elongated horizontal mounting member having a plurality of carriages movably supported thereon, each of said carriages having a rotatable depending supporting member and a stiffening member depending from each supporting member, first control means for effecting linear movement of said carriages longitudinally of said mounting member, second control means for effecting simultaneous rotary movement of said supporting members, each about a respective vertical axis, a window frame draping having alternate light impeding and light transmitting vertical sections, each light impeding section being connected in depending relation to a respective stiffening member, said first and second control means being manually
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operable to selectively move said light impeding sections to open position wherein said light impeding sections are arranged in parallel relation normal to the longitudinal axis of the mounting member and spaced from each other longitudinally of the mounting member, with the light transmitting sections between adjacent light impeding sections being disposed alternately on opposite sides of the longitudinal axis of the mounting member in draped configuration, said first and second control means being operable to selectively move said light impeding sections to closed position wherein said light impeding sections are disposed in overlapping generally co-planar relationship and generally parallel to the longitudinal axis of the mounting member.

5. The invention as defined in claim 4 in which each light impeding section comprises a relatively fine mesh fabric and each light transmitting section comprises a relatively coarse mesh fabric.

6. The invention as defined in claim 5 in which the fine mesh fabric effectively impedes the transmission of light.

7. The invention as defined in claim 4 including stiffening means associated with each light impeding section.

8. The invention as defined in claim 4 including stiffening means associated with the upper and lower edges of each light impeding section.

9. The invention as defined in claim 4 including means disposed below the panel and operating in conjunction with the supporting means for anchoring and controlling the rotary and linear movement of the panel sections.

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