March 10, 1964 J. A. ANDERSON 3,124,195

BLIND AND VALANCE COMBINATION

Filed Nov. 30, 1961

4 Sheets-Sheet 1

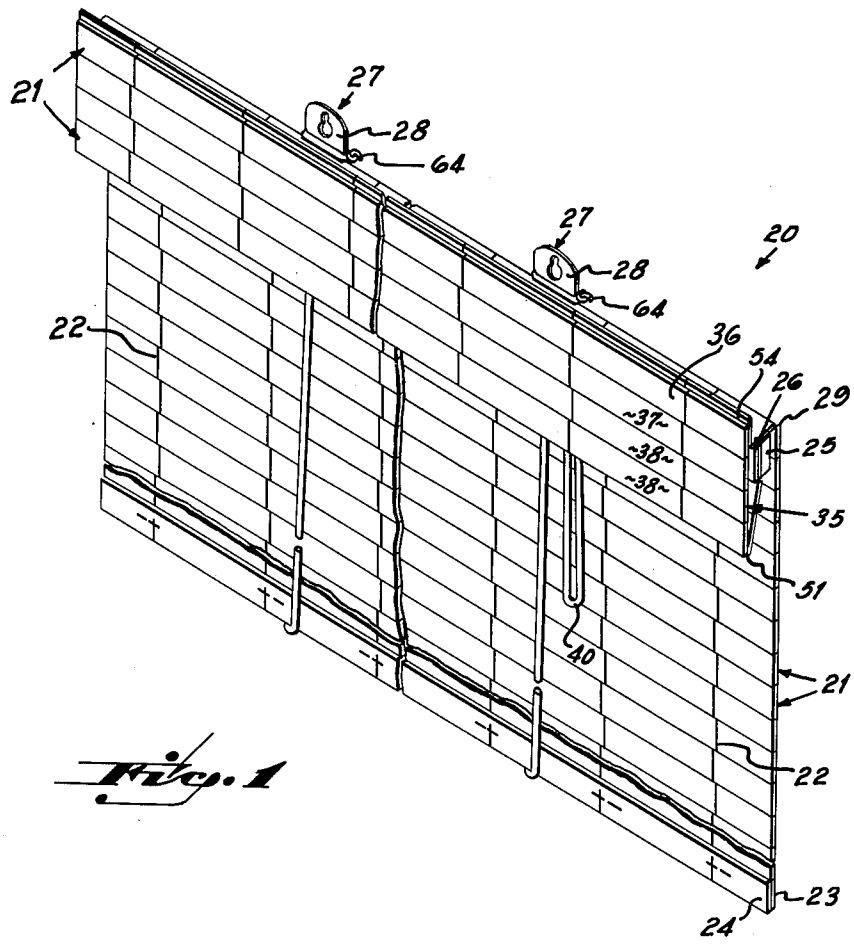


Fig. 1

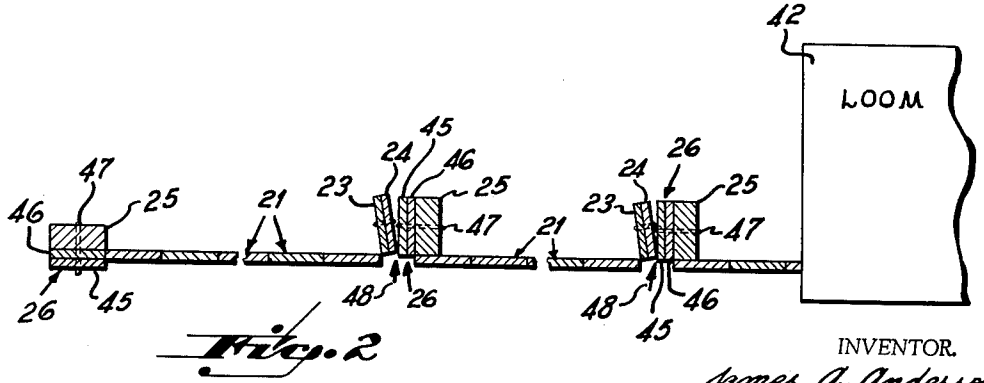


Fig. 2

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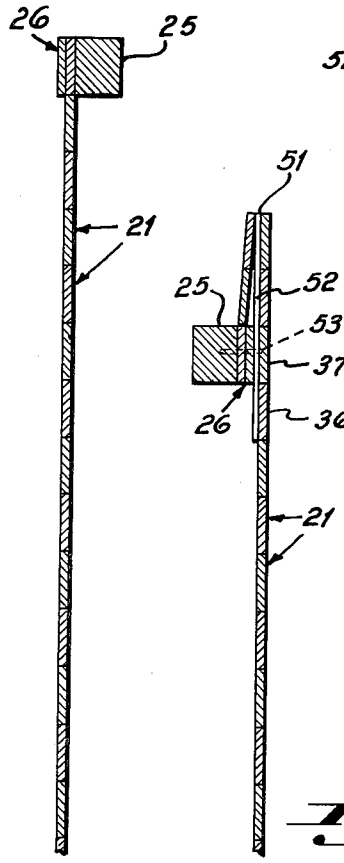


Fig. 3

Fig. 4

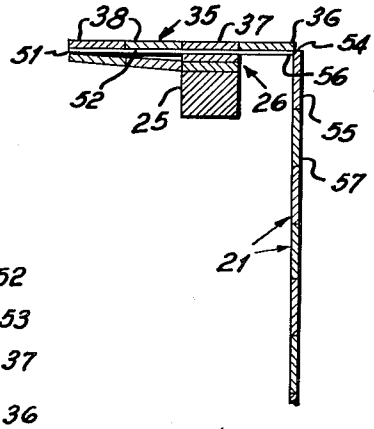


Fig. 5

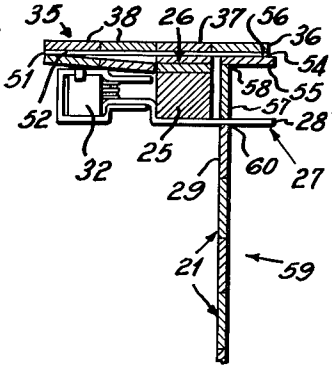


Fig. 6

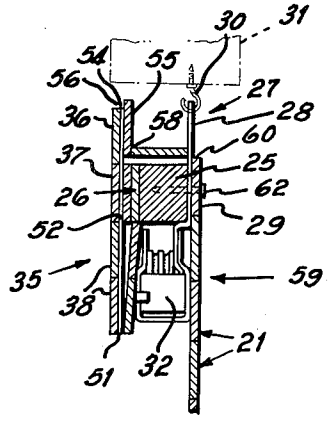


Fig. 7

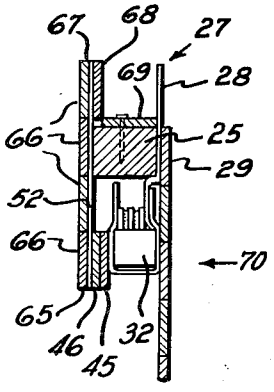


Fig. 9

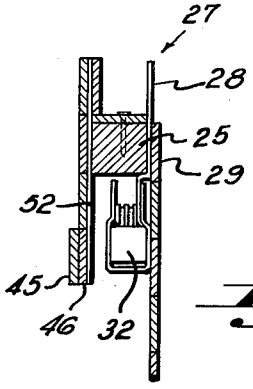


Fig. 10

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4 Sheets-Sheet 3

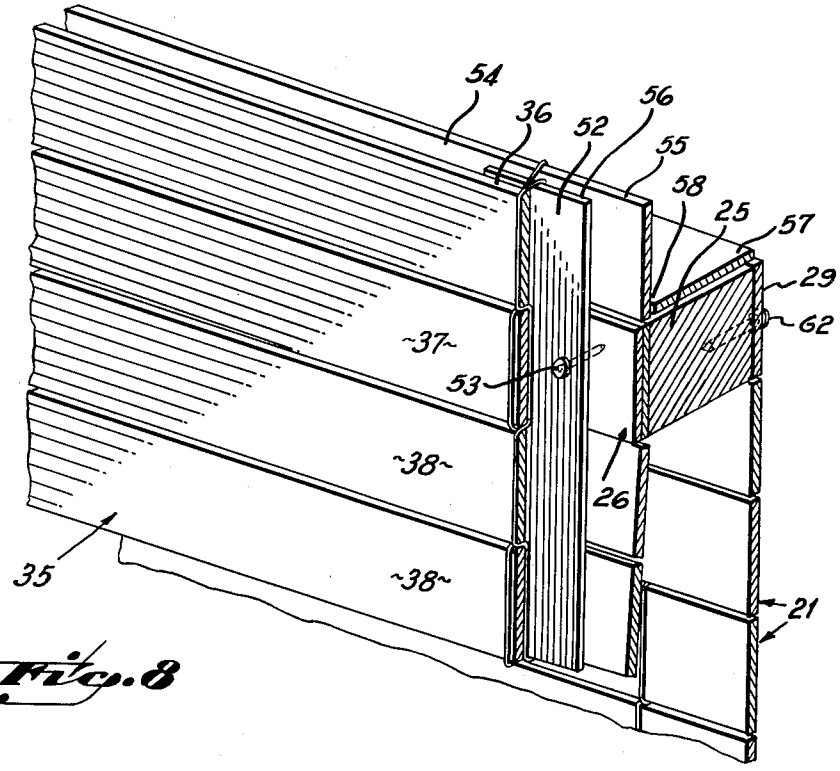


Fig. 8

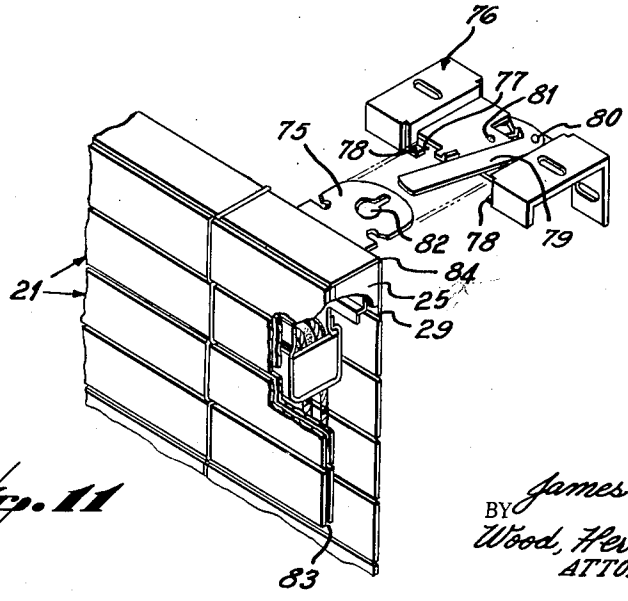


Fig. 11

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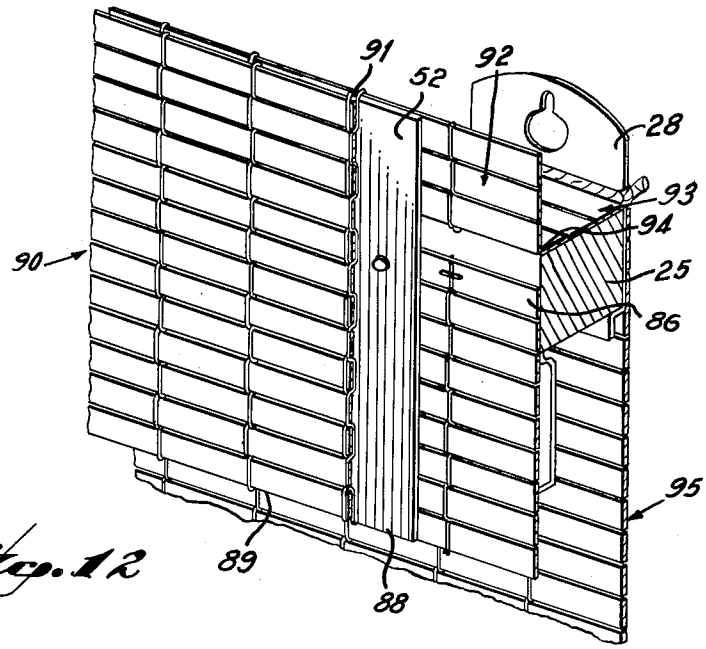


Fig. 12

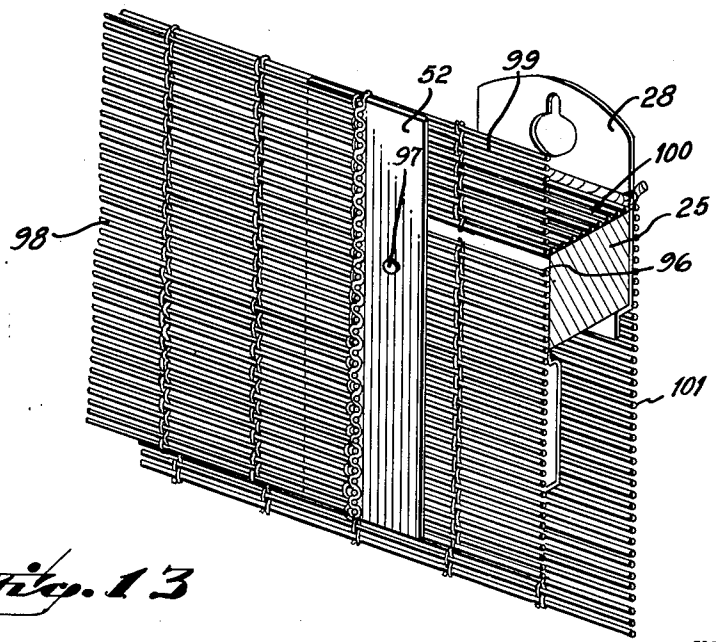


Fig. 13

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United States Patent Office 3,124,195 Patented Mar. 10, 1964

3,124,195
BLIND AND VALANCE COMBINATION

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Filed Nov. 30, 1961, Ser. No. 155,935
4 Claims. (Cl. 160—19)

This invention relates to a blind of the type employed as a porch shade although the invention is not necessarily restricted to a porch shade. The invention is particularly directed to the combination of such a woven blind and a valance for the blind, the valance being formed from the same material of which the blind was woven.

In present porch shades, a plurality of generally parallel slats, sticks or bamboo members are interwoven with cord on machinery designed for that purpose and are provided with a headrail at the upper end and a bottom rail at the lower end. At the upper end the blinds are provided with mounting hardware as well as pulleys, which receive a draw cord used to raise and lower the blind. In some instances, the mounting hardware is combined with the pulleys, these combination units being connected to the headrail in some suitable manner so as to provide support for the blind and to provide a pulley mechanism for the draw cord.

Blinds of this type are normally used in porches where the setting is such that the home owner does not wish to undertake a great deal of expense to obtain that quality of blind which is found within the home. As a consequence, the woven blinds normally are permitted to hang in the porch with the hardware and headrail exposed. If the home owner is desirous of covering the hardware and headrail in order to improve the appearance of the blind, he must obtain separate materials and undertake the expense of the construction of a valance for the blind.

The present invention is directed toward providing a blind having a unitary valance formed of the same material from which the blind is woven. The valance is formed by the folding of a portion of the blind adjacent the headrail in such a manner as to dispose a width of blind in front of the headrail, that width of blind extending above the headrail to cover the mounting means and extending below the headrail a distance sufficient to cover the pulley system with which the draw cord is used.

There are several forms of folding of the upper portion of the blind in order to form a valance and the preferred form will be described in detail below. All of the forms have the certain advantages in common. Insofar as the forming of the valance is concerned, a principal advantage resides in the adaptability of the valance construction to present blind forming operations.

The machines presently used for weaving and forming blinds are easily adaptable for making blinds of various lengths in order to supply the varying requirements of different customers. To use present machines in the formation of the valance of the present invention, all that is required is to cut each blind a predetermined number of inches longer than normally would be required for the desired blind length. The headrail and the bottomrail may be attached in a manner identical to that previously employed. Thereafter, the valance may be formed by a simple folding and stapling or tacking operation.

Another advantage of the invention is its applicability

to many types of blinds, including the slat blind, bamboo stick blind and the accordian fold blind. In each case, the attractiveness of the blind may be greatly enhanced without adding greatly to the expense of manufacture.

The several objectives of the invention will become more readily aparent from the following detailed description taken in conjunction with the accompanying drawings in which:

FIG. 1 is a perspective view of a blind employing my invention;

FIGS. 2 to 7 are diagrammatic views partly in section showing the method of forming the valance for a blind;

FIG. 8 is a fragmentary perspective view illustrating the construction of the valance;

FIGS. 9 and 10 are cross sectional fragmentary views of alternative forms of folding for creating the invention;

FIG. 11 is a fragmentary perspective view illustrating an alternative form of blind mount, and

FIGS. 12 and 13 are fragmentary perspective views of alternative blind materials employing my invention.

The blind illustrated in the preferred embodiment of the invention is that which is commonly known as a slat blind. It should be well understood that the invention is equally applicable to other types of blinds such as those illustrated in FIGS. 12 and 13 and that the description of the invention in connection with a slat blind is merely by way of illustration.

Referring to FIG. 1, the blind is indicated at 20 and comprises a plurality of slats 21 which are interwoven with cord indicated at 22. The lowermost slat 23 has a bottomrail 24 stapled thereto, the staples passing through the cord so as to provide assurance that no free cord ends will remain after the blind has been formed.

A headrail 25 is normally secured to a pair of endmost slats indicated at 26. The hardware by which the blind is mounted is indicated at 27 and is shown in somewhat greater detail in FIG. 7. It should be appreciated that the invention is applicable to any known type of porch shade hardware although I prefer to use a hanger and pulley combination of the type described in my copending application Serial No. 129,635 filed August 7, 1961.

Referring to FIG. 7, the hardware has an upper plate 28 which extends between the headrail 25 and a slat indicated at 29 and is connected to hooks 30 or any other suitable support mounted in the surrounding supporting structure shown in broken lines at 31. The lower portion of the hardware comprises a pulley mount and pulley through which the draw cord passes. That portion of the hardware is indicated at 32. The relationship of the hardware to the blind is such that the engagement of the pulley portion 32 with the headrail provides support for the blind.

Referring again to FIG. 1, the blind has a width of material which forms a front section 35, the front section in the illustrated form of the invention being four slats wide. The uppermost slat 36 projects above the headrail 25 and terminates along a line at substantially the same level as the upper extremities of the mounting hardware 27.

A second slat 37 is substantially co-extensive with the headrail 25 and two lower slats 38 depend below the

headrail a distance slightly greater than the lower extremity of the pulley section 32 of the hardware.

A draw cord 40 is secured to the blind in a manner described in my co-pending application Serial No. 129,635, now Patent No. 3,092,172 issued June 4, 1963, in order to permit the blind to be raised and lowered.

It can be appreciated by reference to FIGS. 1 and 7 that when the blind is installed, the valance covers all of the supporting and operating mechanism except those portions of the draw cord which extend below the lowermost slat of the valance.

Steps in Forming the Valance

The manner in which the slat blind and valance is formed is illustrated in FIGS. 2 to 7. While particular reference has been made to a slat blind, it of course should be well understood that the invention is equally applicable to other types of blinds as the process of making them will be substantially the same.

FIG. 2 is a diagrammatic illustration of the manner in which the blinds are normally completed. The blinds are woven in a loom of known design indicated at 42. As a web of woven blind issues from the loom, the two adjoining slats 23 and 24 forming the lowermost portion of the blind are folded together and secured by a wire stitcher which drives a U-shaped wire staple through the wood with the legs crossing over the warp cord. Then the next two succeeding slats 45 and 46 (forming the pair 26) are folded together and a headrail 25 is placed adjacent the slat 46. A stitching machine drives a staple 47 through the headrail 25 and the contiguous slats 45 and 46. A staple should be driven at each position where the woven cord 22 appears so that the staple will clamp the cord to the slat 24 and to the slat 45. Thereafter a cutting knife applied at the position of arrow 48 severs the cords between the adjoining slats 24 and 45.

The process of forming a slat blind described above is that which is presently being employed in the manufacture of slat blinds. The invention requires no change whatsoever in the process described above. All that is required is to set the folding, stapling and cutting operation so that an additional few inches of blind are formed between the headrail and the bottomrail. For example, in the embodiment described in connection with FIGS. 2 to 7, nine additional slats would be required to be formed in the blind in order to permit the folding of the valance.

After the folding, stapling and cutting operation described above the upper portion of the slat blind appears as shown in FIG. 3. The blind would normally be in condition to receive the pulley and mounting hardware. However, by following the valance forming steps described below, the blind can be brought into the condition shown in FIG. 7 so that not only is the blind provided with pulley and mounting hardware, but the hardware is concealed through the formation of the valance.

The first step in the formation of the valance is to form a fold at 51 as shown in FIG. 4 over one or more stiffening slats 52 spaced horizontally along. In practice, prior to forming the fold at 51, the stiffening slat 52 can be placed on the slat 45, centered on the warp cord as shown in FIG. 8 and stapled or tacked thereto as at 53 to secure the stiffening slat in position. Thereafter the fold can conveniently be made. In the case of the slat blind, the stiffening slat is not absolutely necessary, although it has been found that the stiffening slat assures a neater, trimmer appearance of the valance.

The next step in the operation is illustrated in FIGS. 5 and 6. As shown in FIG. 5, a fold 54 is formed between slat 36 and a slat 55 over the upper edge 56 of stiffening slat 52. Another slat 57 is folded as at 58 with respect to slat 55 so that slat 57 extends across the headrail 25.

In the final step, illustrated by FIGS. 6 and 7, the remainder of the blind indicated at 59 is swung about a fold position 60 so as to be parallel to the front section 35. The uppermost slat 29 of the remaining group of slats preferably is tacked at spaced intervals along its length as at 62 (FIG. 7) to the headrail 25. The hanger plate 28 of the hardware may be inserted between slats 57 and 29 when the blind is in the stage illustrated in FIG. 6 or when the blind is in the stage illustrated in FIG. 7. As described in my co-pending application, the hardware is secured to the blind by looping the cord 40 about slots in the hanger plate 28 as illustrated at 64 in FIG. 1. The completed valance with the hardware eliminated has been illustrated in FIG. 8.

Alternative forms of folding the slats to form valances are illustrated in FIGS. 9 and 10. These forms of the invention require a slight variation in the manner of forming the slat blind from that illustrated in FIG. 2. The only significant difference resides in either eliminating the stapling of the headrail 25 to the slat 46 or alternatively to staple the headrail at another position on the slat blind.

In FIG. 9 the slats 45 and 46 are joined together as before. These slats are folded as at 65 over the stiffening slat 52. Prior to the folding operation, the slat 52 is stapled to the slats 45 and 46.

Four slats indicated at 66 are laid across the stiffening slat 52 and a fold is formed at 67 between the uppermost of the slats 66 and a slat 68. The next succeeding slat 69 is laid across headrail 25 and is stapled or tacked thereto. As suggested above, the headrail 25 could have been secured to the slat 69 as the blind issues from the loom, that is, at the time of the stapling of slats 45 and 46. Alternatively, the tacking of the headrail 25 can be delayed until the folding of the valance.

The remaining slats indicated at 70 are folded over the headrail to depend therefrom and the hanger plate 28 of the hardware is inserted between slat 69 and the uppermost of the depending slats 70 to complete the formation of the valance.

A similar operation is performed to form the valance of FIGURE 10. In that embodiment, the position of slat 45 is reversed so that it faces outwardly of the valance in order to provide a border strip along the bottom of the valance. In that embodiment the number of slats required to form the valances is reduced by one in view of the elimination of the folding of slats 45 and 46 over an adjoining slat to form the fold 65 appearing in the embodiment of FIGURE 9. Other than the differences noted above, the valance of FIGURE 10 is identical to that of FIGURE 9.

Still another alternative is shown in FIGURE 11. The embodiment of FIGURE 11 is adapted for use with hardware in which the hanger plate is bent at right angles in order to adapt it for application to a horizontal receptacle as by sliding the hanger in and out of the receptacle. Other than the right angle bend, the hardware may be identical to that described in my co-pending application. As illustrated, an angulated hanger 75 is adapted to be projected into a horizontal receptacle 76. The receptacle has a channel 77 to receive the hanger 75, the channel being formed in part by two tabs 78 projecting inwardly. A locking lever 79 is pivoted as at 80 on the receptacle and has a locking detent 81 engageable with the key hole slot 82 on the hanger 75 in order to lock the hanger firmly in position in the receptacle.

Because of the angulated hanger 75, the valance does not require an upwardly projecting slat to conceal the hardware. As a further consequence of this construction, the stiffening slat 52 is not necessary since the valance forming slats should be drawn straight down by the force of gravity. However, to provide complete assurance of a neat valance, the stiffening slat 52 may be employed. The blind may be formed as described in connection with FIGURE 2 prior to the formation of the valance, it being remembered that nine additional slats are required for the formation of the valance. The valance is formed simply by folding as at 83 and swinging the remaining

slats up, around and down the headrail 25. As the slats are being brought over the reverse side of the blind and prior to the formation of the fold indicated at 84, the hardware hanger plate 75 should be inserted.

The application of the invention to alternative materials is illustrated in FIGS. 12 and 13. In FIG. 12 a slat blind is illustrated although the slats there are much narrower than slats of the previously described embodiment. The valance is formed by securing an endmost slat 86 to a headrail 25 and tacking a vertical stiffening slat 52 to the headrail 25 overlying the slat 86 and those depending from it. The blind is folded about the lower end 88 of the slat 52 to form a fold as at 89. A section of slats indicated at 90 is disposed across the slat 52 and a fold is formed at 91 over the top of the slat 52. A section of slats 92 is disposed across the upper rearward portion of the slat 52 and a section of slats 93 is disposed across the top of the headrail with a fold 94 being formed between sections 92 and 93. The remainder of the blind depending from the section of slats 93 hangs downwardly as indicated at 95. The hardware is applied as before by inserting the hanger plate 28 through the space between the slats of depending section 95 and the headrail 25.

A valance for a bamboo stick blind is illustrated in FIG. 13. There the endmost sticks 96 are stapled to headrail 25 and a stiffening slat 52 overlies the endmost slats 96 and is tacked to the headrail 25 as at 97. The valance is formed by folding the blind in a manner identical to that described in connection with FIG. 12 to form a front section 98, an upper rearward section 99 and a section 100 extending across the top of the headrail 25. The remaining portion of the blind 101 depends from the section 100 and the hardware is applied as described above by inserting it between the headrail 25 and the depending blind portion 101.

The manner of forming the valances of FIGS. 12 and 13 may, of course, be varied from that illustrated. For example, the folding illustrated in FIGS. 9 and 10 may be adapted to the material of FIGS. 12 and 13.

I claim:

1. An article of manufacture comprising,
a plurality of parallel blind elements interwoven with cord to form a blind having a main blind forming portion and a valance forming portion integral with said main blind forming portion,
said blind having an upper end portion,
a head rail secured to the upper end portion of said blind,
at least two pulleys mounted on said head rail and having lower portions extending below said head rail in front of said main blind forming portion,
said integral valance forming portion of said blind immediately adjacent said head rail being folded across said head rail and downwardly from said head rail to a position spaced from said main blind forming portion, with said lower pulley portion located between said main blind forming portion and said valance forming portion.

2. An article of manufacture comprising,
a plurality of parallel slats interwoven with cord to form a slat blind having a main blind forming portion and a valance forming portion integral with said main blind forming portion,
said blind having an uppermost slat,
a head rail secured to the uppermost slat of said blind,
a pair of pulley hangers mounted on said head rail and having upwardly directed hanger plates projecting between said uppermost slat and said head rail and pulley mount extending below said head rail in front of said main blind forming portion,
said integral valance forming portion of said blind immediately adjacent said head rail being folded across said head rail and upwardly and downwardly from said head rail to a position spaced from said main blind forming portion, with said pulley mount located between said main blind forming portion and said valance forming portion, and with said hanger plates concealed by said valance forming portion.

3. An article of manufacture comprising,
a plurality of parallel slats interwoven with cord to form a blind having a main blind forming portion and a valance forming portion integral with said main blind forming portion,
said blind having an upper terminal slat,
a head rail secured to said upper terminal slat,
at least two pulleys mounted on said head rail and having lower portions extending below said head rail in front of said main blind forming portion,
said integral valance forming portion of said blind immediately adjacent said head rail being folded across said head rail and downwardly from said head rail to a position spaced from said main blind forming portion, with said lower pulley portion located between said main blind forming portion and said valance forming portion, the orientation of said valance forming portion being as follows:
a first group of said slats depending from said terminal slat in front of said pulley lower portions,
a second group of said slats extending upwardly from the lowermost of said first group of slats,
and a slat extending across said head rail and connected to said main blind forming portion.

4. An article of manufacture comprising,
a plurality of parallel blind elements interwoven with cord to form a blind having a main blind forming portion and a valance forming portion integral with said main blind forming portion,
said blind having an upper end portion, a head rail secured to the upper end portion of said blind,
at least two pulleys mounted on said head rail and having lower portions extending below said head rail in front of said main blind forming portion,
said integral valance forming portion of said blind immediately adjacent said head rail being folded across said head rail and downwardly from said head rail to a position spaced from said main blind forming portion, with said lower pulley portion located between said main blind forming portion and said valance forming portion, said valance forming portion including:
a first group of elements secured to said head rail in front of said hangers,
a second group of elements overlying the first group of elements,
and at least one vertical stiffening slat disposed between said first and second groups of elements.

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