M. P. BURNS
VENETIAN BLIND RACK

Filed May 25, 1955

Fig. 1

Fig. 2

Maurice P. Burns
INVENTOR.

Attorneys
This invention relates generally to support stands or racks and is more particularly concerned with improvements in a support rack for Venetian blinds wherein the cleaning, re-taping and re-rigging is facilitated.

Accordingly a principal object of the invention is to provide a Venetian blind support rack which includes a resiliently urged extendible central support standard, an upper portion of which has a transverse frame member supporting a pair of spaced adjustable Venetian blind support arms, the lower portion of said support member including an outwardly extending Venetian blind contact arm.

A further object of the invention in conformance with that set forth above is to provide a Venetian blind support rack which is readily disassembled and being constructed of a plurality of detachable parts.

And a further object of the invention in conformance with that set forth above is to provide a needle or cord threader element which facilitates the re-rigging of a Venetian blind supported on the rack, said threading structure including cord retaining means for clampingly engaging the end of the Venetian blind cord and permitting ready insertion of said cord through the conventional slats of a Venetian blind.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of the novel Venetian blind rack;

Figure 2 is a partial side elevational view of the novel rack;

Figure 3 is a perspective view with portions broken away for clarity;

Figure 4 is a sectional view taken substantially on line 1—1 of Figure 3;

Figure 5 is an enlarged partial section view taken substantially on line 5—5 of Figure 1;

Figure 6 is an elevational view of the novel blind cord threader needle; and

Figure 7 is a sectional view taken substantially on line 7—7 of Figure 6.

Indicated generally at 10 is a Venetian blind which includes a top suspension bar 12, a plurality of horizontally disposed tiltable slats 14 which are supported on conventional vertically extending Venetian blind tapes 16, said blind including the usual bottom bar 18, and further including the conventional cord rigging, identified by reference character 20 which provides means for raising or lowering the slats 14 together, or tilting the slats 14 for preventing the penetration of light through said Venetian blind, all of this previously mentioned structure being conventional and well known.

A Venetian blind support rack or standard is indicated generally at 22, which includes a support surface engaging base 24 which has a plurality of angularly related leg portions 26, which may take the configuration of a "crosst," said legs being secured by means of brace elements 28 and wing bolt assemblies 30 to a vertically extending extendible support rod 32.

The support rod 32 includes a lower rod portion 34 which has the lower end thereof secured to the brace elements 28, as previously described, the upper end of the rod portion 34 being hollowed out and defining a tubular support portion 36 which includes the tubular vertically extending hollowed out portion 38. Reciprocally and adjustably received within the bore portion of the tubular portion 36 of the rod portion 34 is an upper rod support portion 40 which includes a pair of oppositely disposed longitudinal flutes or grooves 42 and 44 for a purpose to be subsequently described, and which includes on one of the other sides a longitudinally extending flute or groove 46, the side opposite the groove 46 being disposed adjacent a removable cover portion 48 defining one of the sides of the tubular portion 36 of the rod 34, said plate 48 being secured to the rod by means of suitable fastening screws 50. The portion 36 of the rod 34 includes a longitudinally extending slot 52 which is in communication with the bore portion 38, and spaced on opposite sides of the slotted portion 52 are a plurality of vertically disposed suitably secured pairs of triangular abutment elements 54, each of which includes a horizontal upper stop surface 56, the spacing of the elements 54 providing an open slot 58 in communication with the slot portion 52.

Suitably secured in the groove 42 of the rod element 40 is a suitable resilient or elastic band element 60 which extends across the bottom 62 of the rod element 40 and upwardly within the groove portion 44 having an end portion 64 which is suitably secured to an angularly shaped block element 66 which may be disposed on any one of the pairs of stop elements 54 thus providing a force which tends to urge the rod portion 40 out of the tubular support portion 36 and the lower rod portion 34. The element 66 will be placed on any one of the plurality of pairs of spaced stop elements 54 depending upon the amount of force desired.

Secured to the bottom portion 62 of the rod element 40 is a suitable raising cord 68 which extends upwardly in the groove or fluted portion 46 and through the tubular portion 36 at an aperture 70 which communicates with the bore portion 38, said cord being utilized by applying tension thereto wherein the rod portion 40 may be adjusted vertically and after having been adjusted to a predetermined position the cord 70 may be secured to a suitable upwardly extending bracket or nail 72 which retains the support portion 40 in a predetermined adjusted position.

The upper end 74 of the rod portion 40 includes adjacent thereto a horizontally disposed notched out portion 76 which removably receives therein a medial portion of a cross bar element 78, said cross element including a vertically disposed open notch portion 80, the sides of which extended in an elevating relationship relative to oppositely disposed sides of the element 40. The cross bar 78 includes a suitable aperture portion through which extends a wing nut assembly 82 secured to the rod portion 40 and permitting the ready removal of the cross bar 78 from the rod portion 40.

The cross bar 78 includes at each of its opposite ends a pair of horizontally extending open slots 84 each of which removably receives a wing bolt assembly 86 which extends rearwardly from an outwardly extending support arm 88 to support thereon the top suspension bar 12 of the Venetian blind.

The support arms 88, as seen in Figure 3, include an upwardly turned curved end portion 90 and an enlarged rear portion 92 which terminates in a further enlarged portion 94 providing a support shoulder which extends
substantially the entire width of the cross bar 78. The portions 90 and 92 of the support arm 88 define a recessed portion for more adequately retaining therein the previously mentioned top suspension bar of the Venetian blind.

Extending downwardly from adjacent the upper end portion 76 of the rod portion 40 is a suitably secured hook element 96 which is engageable with a hook element 98 mounted on a suitable horizontal pivot pin 190 carried on the upper end of the rod portion 34. The aforementioned cooperating hook portions are available for retaining portions 34 and 40 together when it is desired to transport or store the Venetian blind rack.

The side 102 of the rod portion 34 includes a longitudinally extending slot portion 104 which has slidably disposed therein a block element 106, said block element including a longitudinally extending slotted portion 108 which has a pair of spaced retaining bolts 119 extending therethrough, said screws having enlarged head portions 112 for retaining but permitting relative slidable movement of the block element 106 relative to the slot 104 in the rod portion 34. Also extending through the slotted portion 108 of the block element 106 is a bolt element 114 which has a wing nut 116 secured therein in overlying relationship to the slotted portion 108 of the block 106. Thus it is apparent that the block element 106 may be adjusted vertically relative to the stop members or screw elements 110 by loosening the wing nut 116. The block element 106 has extending through a suitable recessed portion of its lower end a fastening screw element 118 which is secured to a rear slotted portion of an outwardly extending arm element 120 which includes a downwardly extending end portion 122, said arm element underly ing the previously mentioned arms 83 and generally extending in overlying relationship relative to the usual bottom bar 18 of the Venetian blind.

Utilization of the Venetian blind support rack is believed readily apparent, wherein it is desirable to use the rack for either the purpose of cleaning or re-ribbing Venetian blinds, the top suspension bar 12 is placed over the top of the support arms 88, the spacing of said arms being adjusted by means of the wing nut assemblies 86 and 87, thereafter, after it has been determined that the blind structure requires an extension of the support portion 40, said cord 68 may be manipulated as previously explained to accomplish the raising of the extendible portion 40. At the same time the block element 66 which cooperates with the resilient or elastic element 60 will have been positioned in one of the suitable cooperating pairs of stop elements 54 for aiding in urging the positioning of the extendible support element 40. Of course, the bottom bar 18 will have been positioned beneath the arm 120, and accordingly the Venetian blind will be in a position for either cleaning, re-ribbing, or for merely displaying the same. It is believed readily apparent that a plurality of slotted portions 104, or a relatively elongated slotted portion 104 may be provided on the bottom support member 34 in order to accommodate on the Venetian blind exceptionally short Venetian blinds.

Illustrated in Figures 6 and 7 is a re-threading or re-ribbing needle element indicated generally at 124, said needle element including an elongated shank portion 126 which has at one end a rounded or blunt end 128, and which includes at the other end a tubular end portion 130, said tubular end portion being interrupted by a longitudinally extending slot which has a reduced dimension portion 132 terminating in an enlarged slotted portion 134 disposed inwardly of the tubular end of said needle element.

The Venetian blind cord as indicated at 20 is inserted in the enlarged slotted portion 134 and thence is pulled out of the tubular end 136 of the needle element whereupon the cord 20 is gripped or securely engaged by the reduced slotted portion 132 of said needle element. It is believed readily apparent that the needle element 124 may be readily utilized in re-ribbing of the Venetian blind which includes a plurality of apertured portions extending through the Venetian blind slats 14, said apertures appearing generally behind the tape element 16 of Figure 1.

Various positional directional terms such as "front," "rest," "top," etc., are utilized herein to have only a relative connotation to aid in describing the device and are intended to require any particular orientation with respect to any external elements.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. In combination, a base, a vertical tubular member rising from said base and having an open upper end and an elongated vertical slot in one side thereof, a vertically elongated member rising out of said tubular member and having an upper end provided above the tubular member with said member being vertically slidable adjustable in the tubular member to vertically adjust a Venetian blind suspended from said means, and means for adjusting said vertically elongated member comprising a flexible member in the tubular member extending under the vertically elongated member with one end attached to the upper end of the tubular member and its other end projecting out of said slot for lifting in the slot to lift the vertically elongated member, a crosspiece on said last named end of the flexible member, and vertically spaced pairs of abutment members on said side of the tubular member spaced apart in each pair at opposite sides of the slot to pass said last named end of the flexible member between the blocks of the pairs, and seating said crosspiece on said pairs in different lifted positions of said last named end of the flexible member whereby to hold said vertically elongated member in different adjusted positions.

2. The combination of claim 1, said vertically elongated member having longitudinal slots in opposite sides thereof for guiding said flexible member.

References Cited in the file of this patent

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Inventor(s)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>70,467</td>
<td>Phelps</td>
<td>Nov. 5, 1867</td>
</tr>
<tr>
<td>425,995</td>
<td>Diehl</td>
<td>Apr. 22, 1890</td>
</tr>
<tr>
<td>1,107,075</td>
<td>Karges</td>
<td>Aug. 11, 1914</td>
</tr>
<tr>
<td>1,783,749</td>
<td>Roehl</td>
<td>Dec. 2, 1930</td>
</tr>
<tr>
<td>1,949,576</td>
<td>Nakazato</td>
<td>Mar. 6, 1934</td>
</tr>
<tr>
<td>2,591,686</td>
<td>Du Mais et al.</td>
<td>Apr. 8, 1952</td>
</tr>
<tr>
<td>2,610,777</td>
<td>Harris</td>
<td>Sept. 16, 1952</td>
</tr>
<tr>
<td>2,705,098</td>
<td>Sipler</td>
<td>Mar. 29, 1955</td>
</tr>
</tbody>
</table>