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H. KONEN

2,166,301

VENETIAN BLIND TAPE HOLDER

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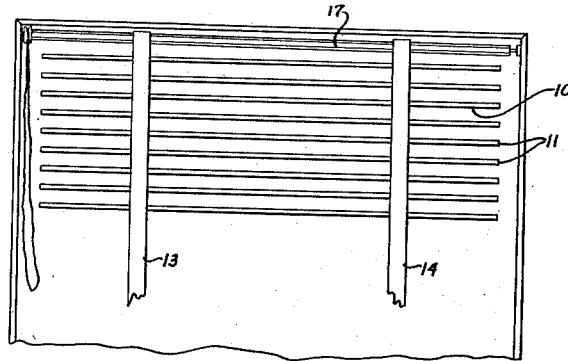


FIG. 1

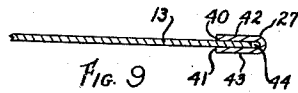


FIG. 9

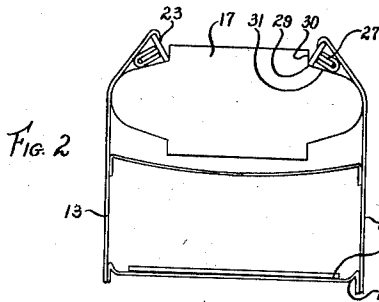


FIG. 2

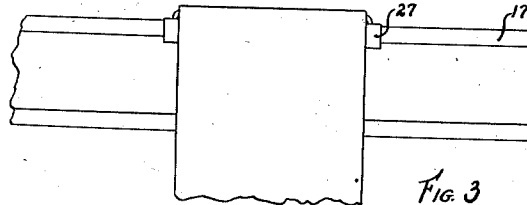


FIG. 3

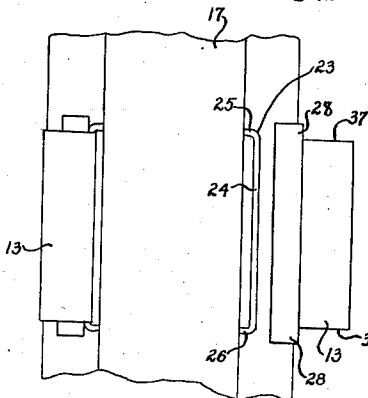


FIG. 4

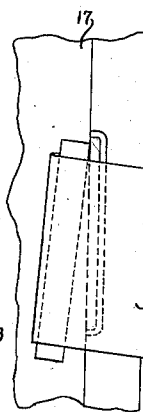


FIG. 5

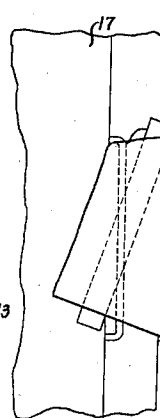


FIG. 6

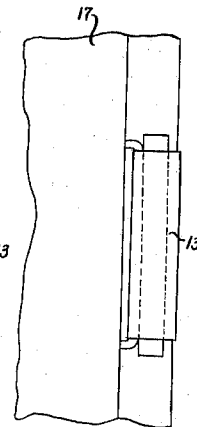


FIG. 7

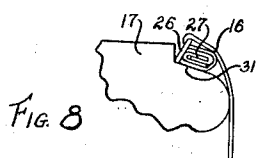


FIG. 8

INVENTOR.

BY

Harry Konen
Frank Ziegler
ATTORNEY.

UNITED STATES PATENT OFFICE

2,166,301

VENETIAN BLIND TAPE HOLDER

Harry Konen, Newport, Ky., assignor to W. J. Baker Co., Inc., Newport, Ky., a corporation of Kentucky

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2 Claims. (CL 156-17)

This invention relates to Venetian blinds, and more particularly to an improvement in the method of fastening the slat supporting side tapes to the supporting member or upper control panel.

An object of the invention is to provide means whereby the slat supporting side tapes may be quickly and easily attached to and detached from the control panel.

Another object of the invention is to provide attachment means of the character mentioned for Venetian blinds which require no tools or means such as screws or nails incident to such attachment or detachment.

Another object is to provide means for the indicated purposes, and which do not require any mechanical ability on the part of such persons as may be called on to detach the slats and tapes for cleaning or otherwise servicing such devices.

These and other objects are attained by the means described herein and disclosed in the following drawing in which:

Fig. 1 is a fragmental elevational view showing a Venetian blind embodying the invention.

Fig. 2 is an enlarged end view of parts shown in Fig. 1, parts being broken away.

Fig. 3 is an elevational view of parts shown in Fig. 2.

Fig. 4 is a top view of Fig. 3 showing the left tape in attached position and the right tape in a detached position.

Figs. 5, 6 and 7 show the successive steps followed in attaching or detaching the straps or tapes in accordance with the invention.

Fig. 8 shows diagrammatically, an adjustment feature of the invention.

Fig. 9 is a sectional view of a strap end and clip forming details of the invention.

It has been the custom, when installing Venetian blinds to permanently anchor the slat supporting side tapes to the control panel by means of small nails, staples, screws or the like. Such blinds could only be removed for cleaning by removing the entire control structure to which the tapes were permanently fastened. By reason of such practice, various other objections resulted. This invention is directed to avoidance of such objections and conditions.

As shown in Fig. 1, the Venetian blind 10 comprises a series of slats 11, ordinarily of wood, which are individually suspended on fabric strips 12 (Fig. 2) which in turn are carried by pairs of straps or tape pieces 13 and 14, attached to support member 17, all of which is old and well known.

Inasmuch as the invention is concerned only with the means of attachment and detachment of the straps 13 and 14 to the carrier or support member or panel 17, the explanation will be limited accordingly. Member 17 is in the nature of a wooden bar, in accordance with customary practice, and may have suitable connection with other parts of the blind, in accordance with general practice.

As shown in Figs. 2 and 3, an ordinary staple 23, of U-shape form, and comprising a base or body portion 24 and spaced arms or legs 25 and 26 is secured to the bar 17, for example by driving the free ends of the arms 25 and 26 into the bar. The staple extends lengthwise of the bar 17. The base or body of the staple is spaced a short distance from the bar, such distance being sufficient to permit passage of a clip 27 between the bar and the body of the staple. The staple arms are spaced at slightly greater distance than the width of the strap 13. The clip is slightly longer than the width of the strap and is also slightly longer than the body 24 of the staple. The clip may be U-shaped and may be attached to the end of a strap by clamping the strap end between the arms of the clip. A staple such as 23, is provided for each strap end that is to be attached to the bar 17.

Each clip is attached to its strap in such manner that a small portion 28 of the clip extends beyond each of the lateral edges 37 and 38 of the strap. By turning the clips at an angle relative to the staples, it is possible to move the clip and tape through the eye or pocket that is produced by the spacing of the staple from the bar. After a clip, together with an attached end of a strap is passed through such an eye, the clip may be moved to parallel position relative to the staple, thus bringing the free ends of the clip into contact with the arms of the staple for anchoring the strap to the bar.

The general arrangement of parts as explained is capable of various refinements. For example, the bar 17 may have longitudinally extending grooves or pockets 29 formed at the junction of the angularly disposed groove walls or faces such as 30 and 31, and the staples may be positioned at such pockets or grooves. The staples may be attached to the bar at such angle, that when a clip and strap are anchored as shown in Fig. 2, the free ends of the clip contact the arms of the staple and the base of the U-shaped clip rests upon the face 31 at such position, that the clip as a whole extends substantially at right angles to the staple arms. In such relationship of

parts, the clip is positioned between the contiguous portion of the strap and the bar, thus substantially screening the clip from sight. The walls 30 and 31 of the grooves diverge at approximately a right angle and the arms of the staple intersect such angle.

It is to be understood that each of the straps is to have its upper end attached to the bar 17 in the same manner. If desired, a similar connection may be provided at the lower end of each of the straps, for attachment thereof to a suitable base bar, not shown.

By reason of the position given to the staple 23, whereby the staple intersects the angle of the groove 20, the clip 27 has a snug fit between the staple and the face 31, thus assuring even distribution over the strap, of strain incident to the weight of the suspended slats. By reason of the right angled position of the clip relative to the staple, the edges 40 and 41 of the clip arms 42 and 43 respectively contact the staple arms 25 and 26 and thus avoid undue tension upon any portion of the connection between the clip and the end 44 of the strap 13. By reason of the fact that the strap 13 is of a width slightly less than the spacing of the arms 25 and 26 of the staple, the strap has a firm, even, unwrinkled contact upon the base 24 of the staple.

Due to the flexible nature of the strap, it is possible for the strap material to gather or compress sufficiently to permit the clip to be passed between a staple and the bar, at an angle to the staple base, as shown in Figures 5 and 6.

A Venetian blind attached by the means herein disclosed may be shortened (Fig. 8) without necessitating cutting of the tapes by pulling an excess of tape material through the staple and winding the excess tape around the clip 27 whereby the tape length is shortened. The clip and tape wrapped around it are tightly held in place between edge 31 of control panel 17 and the under side of tape 13. A quick satisfactory method of tape shortening has been long sought after by the trade, and the method herein disclosed has been directed to meet this need. While the winding of the tape or strap is shown in Fig. 8 as having been accomplished by clockwise turning or revolving of the clip, it is obvious that the same general result is accomplished by turning or revolving the clip in the opposite direction. As shown in Fig. 8, contact of the rolled portion of the tape or strap by the overlying and depending portion of the strap precludes unwinding of the rolled up portion of the strap. If the tape is rolled up by turning the clip in the opposite direction, the contact of the rolled up portion upon the face 31 of the bar 17 accomplishes the same result. The relationship established between the clip ends and the staple likewise precludes unwinding of the rolled up portion of the tape.

While staples such as 23 are shown as integral U-shaped form, it is obvious that means for performing the holding function of the staples may be of other specific form that will cooperate with

the tapes and support bar in substantially the manner in which the staples cooperate with such elements. For example, L-shaped members, having one leg thereof threaded may be attached, in pairs, for accomplishing the same results. The threaded legs of such a pair of such screws, would be attached to the bar at approximately the positions at which the arms 25 and 26 of staple 23 are shown in Fig. 4. The other leg of each such screws would be aligned with the similar leg of its associated screw, whereby such other legs would lie in substantially the position of the body 24 of staple 23, shown in Fig. 4. The ends of such other legs may be in contact or may be spaced. If in contact they would together appear exactly as does the staple 23 in Fig. 4, except that a line of separation of the screws, would be disposed midway of the said body 24. If the adjacent ends of such screws should be spaced, the spacing may be made sufficient to permit the strap to be threaded through such space for attaching and detaching the strap, instead of passing the clip 27 between the holding means and the bar 17.

What is claimed is:

1. In a device of the class described the combination of a bar having a longitudinally extending groove formed therein whereby to provide adjacent angularly disposed faces thereon, a U-shaped staple having a generally elongated base portion, mounted on the bar in said groove, with the staple base in substantial parallelism with said adjacent faces and spaced from said bar, a flexible strap of a width slightly less than the length of the base of the staple, and a U-shaped clip mounted on an end of the strap, and being of a length greater than the length of the staple base, and of a thickness less than the space between the staple base and the bar, the arms of the clip receiving the strap end between them, said clip being held in contact upon one of the faces of the groove by a portion of the strap extending beyond the staple.

2. In a device of the class described the combination of an elongated bar having a longitudinally extending groove formed therein, the walls of said groove diverging at approximately a right angle, strap holding means mounted in and intersecting said groove and having a portion disposed in substantial parallelism with the walls of said groove, a flexible strap for insertion between the bar and the portion of the strap holding means parallel with the groove walls, and a clip secured to the end of the strap and adapted to be passed between the bar and the strap holding means and to contact the strap holding means for precluding separation of the strap and bar when assembled, said clip being held in contact upon one of the groove walls by a portion of the strap extending beyond the strap holding means whereby the clip and any portion of the strap wound or rolled about said clip are precluded from turning or unwinding.

HARRY KONEN.