Nov. 1, 1949 R. H. WRIGHT 2,486,771

CENTER SUPPORT FOR VENETIAN BLINDS

Filed April 12, 1946

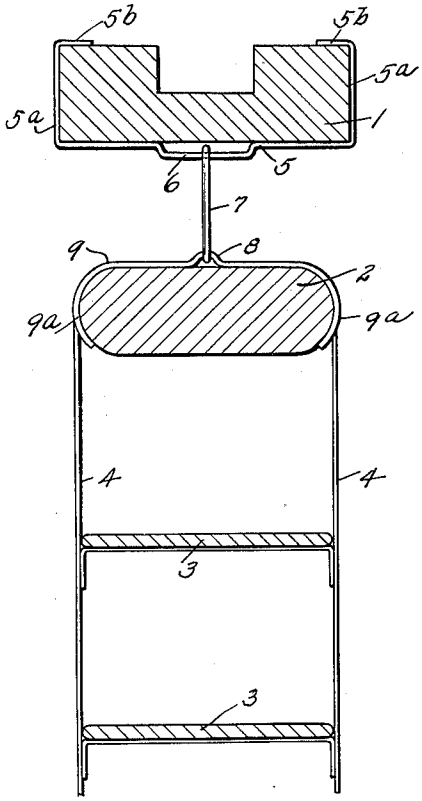


FIG. 1.

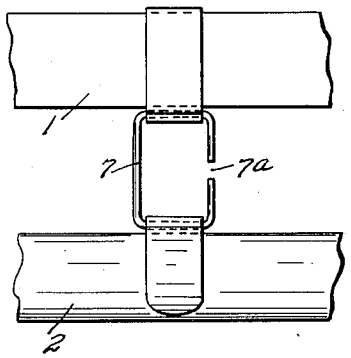


FIG. 2.

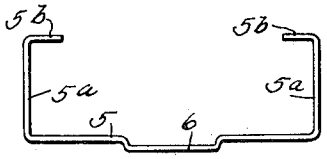


FIG. 3.

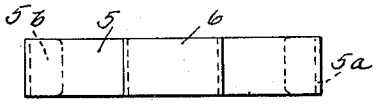


FIG. 4.

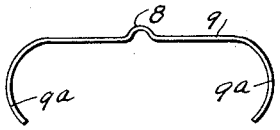


FIG. 5.

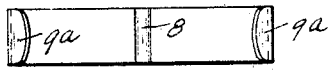


FIG. 6.

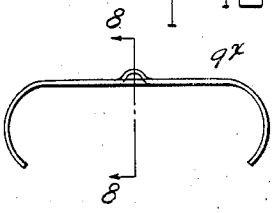


FIG. 7.



FIG. 8.

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CENTER SUPPORT FOR VENETIAN BLINDS

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Application April 12, 1946, Serial No. 661,674

4 Claims. (Cl. 160—177)

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The present invention relates to the art of Venetian blinds, and involves primarily certain of the hardware features of such blinds.

As is well known, Venetian blinds used in conjunction with wide windows are usually designed with long slats, and the blind unit itself is supported primarily from a tilt bar in the customary way known in the art. The weight of the slats of the unit, where long slats and a correspondingly long tilt bar are necessary, tends to sag the tilt bar at the middle portion of the same so that heretofore it has been proposed to prevent such sagging by utilizing a link connector between the middle or other portions of the tilt bar and the head rail or bar, which in turn carries the tiltable blind unit, said head bar being mounted stationary at the top of a window.

My present invention involves an improved means of attaching a center support, as it is called in the art, to the head rail and tilt bar, said means being especially adapted for quick detachable engagement with the said rail and with the tilt bar member of the blind. The detachable feature of my improved center support or connecting device is particularly advantageous when it is desirable to demount the head unit from the head rail or bar leaving the latter attached to the window frame.

In certain prior center support devices for tilt bars, it has been common to utilize a hardware unit consisting of an attachment plate secured to the underside of the head rail, an attachment plate secured to the top of the tilt bar and having a pivot portion countersunk in the latter by grooving of the bar, and a link connecting the said attachment plates on the rail and tilt bar members. Such construction, however, tends to weaken the tilt bar at the middle or intermediate its ends, where the center support is mounted, because of the notching of the tilt bar for the link attachment thereto.

The last described construction with certain disadvantages incident to its use is done away with according to my present invention, the details of which will be more fully understood upon reference to the following description in connection with the accompanying drawings, in which:

Figure 1 is a vertical sectional view showing a conventional head rail, a tilt bar supported by the head rail, and a portion of the slat unit which in turn is attached by tapes to the tilt bar, my

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center support device being illustrated as applied to the above parts.

Figure 2 is a fragmentary view in front elevation, showing more fully the center support device of my invention.

Figure 3 is a view in elevation of the upper detachable clip member, which is applied to the head rail.

Figure 4 is a top plan view of the member shown in Figure 3.

Figure 5 is a view in elevation, an edge view, of the connecting clip member which is applied to the tilt bar.

Figure 6 is a top plan view of the member shown in Figure 5.

Figure 7 is a view similar to Figure 5 showing the modified construction of the member of the latter figure.

Figure 8 is a sectional view of the modified construction of Figure 7, taken about on the line 8—8 of Figure 7.

Describing my invention in respect to the details of the center supporting means of the novel construction proposed, I refer first to Figure 1, in which is illustrated a conventional head rail or bar 1, such as fixed to the top of a window frame for carrying the Venetian blind slat unit. The tilt bar of the slat unit is designated 2 in Figure 1, and is also of a conventional type, to which, at the front and rear sides thereof, the slat supporting tapes 4 for the slats 3, are attached. Tilting of the bar 2 will, of course, tilt the slats 3 in the customary way and any conventional tilt device may be employed for this purpose, supported from the head rail 1.

As previously noted, my center support connector of the present invention is located at a point centrally of the ends of the members 1 and 2, or should the blind unit be excessively wide necessitating the use of very long length slats or members 1 and 2, more than one of my connectors may be provided intermediate the rail 1 and the tilt bar 2.

Describing the connector device above referred to specifically, it is noted that it comprises an upper head rail clip 5 of somewhat rectangular shape, when viewed from the side, and comprising a lower bar having the vertical side extensions 5*a* and the inwardly projecting flanges or extensions 5*b*, which latter are relatively short. The clip member 5, because of its construction of

resilient metal or the like, may be expanded slightly by separating movement of the ends thereof to enable it to be detachably engaged so that the lower bar underlies the head rail 1.

The vertical extensions 5a contact with the front and rear sides of the rail 1 and the flanges or parts 5b engage over the upper side of the rail 1. At its lower portion the clip member 5 is formed with an elongated loop or offset portion 6 and an approximately rectangular link 7 is engaged with said loop by the upper cross bar of the link, see Figure 2. At its lower portion, the link 7 is interengaged with a loop portion 8 of another connecting clip member 9, which is somewhat similar to the member 5, but shaped a little differently, in order to conform with the cross sectional shape of the tilt bar 2. The clip member 9, therefore, is formed with front and rear extensions 9a that are curved in a manner corresponding with the curved or rounded front and rear sides of the tilt bar 2 so as to snugly engage the latter when the clip member 9 is to be attached to the tilt bar. The clip member 9 is also made of spring metal, or like substance, so that its end extensions 9a may be separated by spring action preliminary to and in the operation of interengaging the member 9 with the bar 2 after the manner shown in Figure 1.

The loop 8 constitutes a pivot loop for the link 7, the link 7 being of somewhat rectangular form and preferably made from a single length of wire, one side of the link being open as shown at 7a for conveniently interengaging the link with the members 5 and 9, and disengaging said parts whenever desired, particularly in the assembly of the blind unit upon the head rail, or disassembly of these parts.

In a measure, by reason of the construction of the parts 5, 7 and 9, the tilt bar 2 is pivotally floatable from the head rail, and the link 7 is so arranged that it does not interfere with the tilting action of the tilt bar 2 in the ordinary operation of the blind for the reverse tilting adjustments of the slats 3. The loop 8, according to the construction in Figures 1 to 6, inclusive, extends the entire width of the clip member 9.

In Figures 7 and 8, a modification in the form of the clip member 9 is shown as designated 9x, and is practically the same as the clip member 9, except that the supporting loop 8a is struck upwardly from the top of the member 9 and is narrower than the width of said member.

The use of my invention is thought to be obvious. It is not necessary to notch the tilt bar 2 in using the center support connector of my construction. Moreover, the action of uniting the connector to the head rail 1, and the tilt bar 2, merely involves the interconnecting of the parts 5 and 9 by the link 7, and, thereafter, interengaging the clip member 5 of the head rail 1, and the clip member 9 with the tilt bar 2.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States, is:

1. In a Venetian blind, in combination, a head rail, a tilt bar, a center support connecting device for the said rail and bar comprising a spring having detachable interlocking engagement with the head rail, a member secured to the tilt bar, and a link connected to the last mentioned member and pivotally connected to the clip member first mentioned.

2. A Venetian blind structure comprising a head rail, a tilt bar, a clip member detachably engaged with the head rail, a clip member detachably engaged with the tilt bar, and a link connecting the clip members, in which the clip member engaged with the head rail is of approximately rectangular form with spring separable parts overlying the head rail, and in which the clip member engaging the tilt bar comprises front and rear separable spring extensions to coact the said bar.

3. A Venetian blind structure comprising a head rail, a tilt bar, a clip member detachably engaged with the head rail, a clip member detachably engaged with the tilt bar, and a link connecting the clip members, in which the clip member engaged with the head rail is of approximately rectangular form with spring separable parts overlying the head rail, and in which the clip member engaging the tilt bar comprises front and rear separable spring extensions to coact the said bar, the lower portion of the rail clip member and the upper portion of the bar clip member each being equipped with a pivot loop for connection with the link.

4. A Venetian blind structure comprising a head rail, a tilt bar, a clip member detachably engaged with the head rail, a clip member detachably engaged with the tilt bar, and a link connecting the clip members, in which the clip member engaged with the head rail is of approximately rectangular form with spring separable parts overlying the head rail, and in which the clip member engaging the tilt bar comprises front and rear separable spring extensions to coact the said bar, the lower portion of the rail clip member and the upper portion of the bar clip member each being equipped with a pivot loop for connection with the link, and the link being of generally rectangular form and having one of its sides interrupted to provide an opening for enabling quick attachment of the link to the clip members.

RICHARD H. WRIGHT.

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The following references are of record in the file of this patent:

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Certificate of Correction

Patent No. 2,486,771 November 1, 1949

RICHARD H. WRIGHT

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows:

Column 4, line 3, after the word "spring" insert *clip member*;

and that the said Letter Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 21st day of February, A. D. 1950.

[SEAL]

THOMAS F. MURPHY,
Assistant Commissioner of Patents.