April 26, 1938. H. G. BALTHASAR 2,115,663

VENETIAN BLIND

Filed Dec. 30, 1936

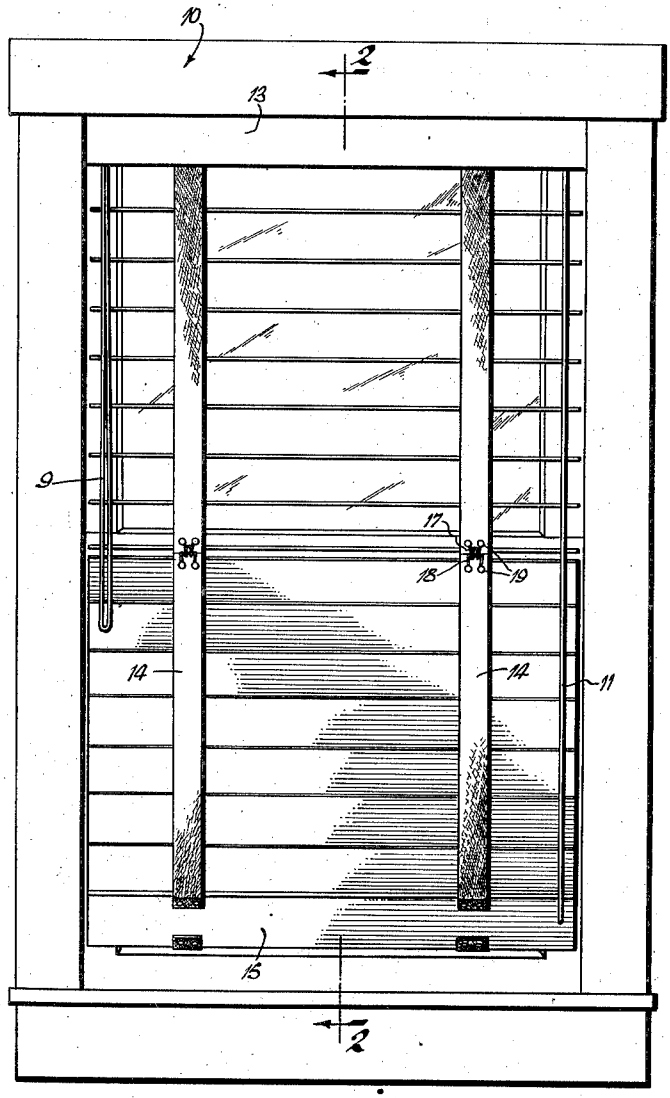
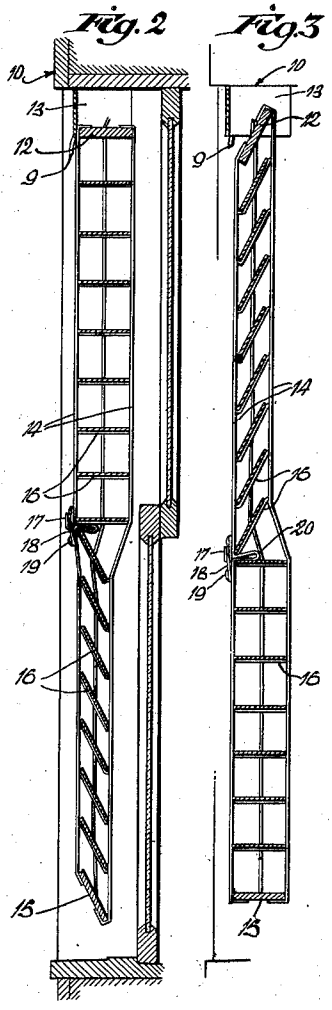
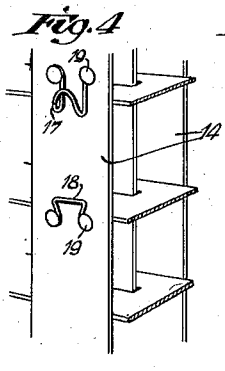
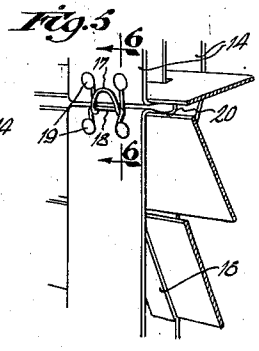
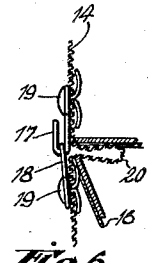


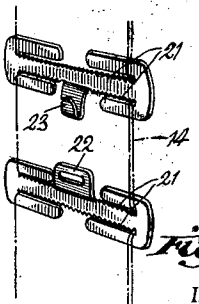
Fig. 1











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VENETIAN BLIND

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8 Claims. (Cl. 156—17)

This invention relates to Venetian blinds and is particularly directed to an improved device for controlling the angular positions of the slats thereof.

In the operation of the conventional Venetian blind, the user adjusts the angular positions of the slats dependent on the degree of light outside the window or the degree desired inside the room. The slats are always disposed in parallelism. Very often it happens that the slats, due to the position of the sun, cannot be arranged so as to give sufficient light in the room without admitting the direct rays of the sun. Also it frequently occurs that the user of the blind is desirous of having a maximum of light and at the same time wishes to maintain the privacy of the room.

With no opportunity of varying the angle of the slats with respect to each other, the flexibility and adaptability required to satisfy the particular demands has been lacking. There are instances where it would be desirable to have all of the slats, let us say half way up from the bottom in fully closed or vertically disposed position, whereas, the upper slats are fully open or horizontally disposed. Also the reverse condition may exist when it is desirable to have the upper part completely closed.

It is therefore, the object of the present invention to provide increased flexibility for a Venetian blind whereby the slats may be set at different degrees of inclination relative to each other.

Described more specifically, the invention resides in the conception of a device which permits a complete closing or opening of all slats, or a complete opening of a portion of the slats and closing of the balance, that is, permits the slats in one portion of the blind to be set at different degrees of inclination relative to the slats in the other portion of the blind.

It is a further object of the invention to provide a device for this purpose which is extremely simple, which may be applied to the blind at different positions and, which may be attached to any standard Venetian blind.

It is a further object of this invention to provide a device for use on Venetian blinds which will not interfere with the manipulation of the normal slat tilting means and which will be effective for causing opening of one section while closing another section by manipulation of the normal slat adjusting means.

Other objects and further advantages will be more fully apparent from the description of the accompanying drawing, in which:

Figure 1 is a front or inside view of a window illustrating a Venetian blind mounted therein with the present invention applied thereto.

Figure 2 is a sectional view taken on line 2—2, Figure 1, illustrating the device of the invention in operation wherein the lower half of the slats is closed and the upper half is open.

Figure 3 is a view taken similar to Figure 2, but illustrating the reverse condition wherein, the upper half of the slats is closed.

Figure 4 is a fragmentary perspective view illustrating the device in a position of non-use.

Figure 5 is a fragmentary view taken similar to Figure 4, but showing the device in operation.

Figure 6 is a sectional view taken on line 6—6, Figure 5, detailing the device in the position of Figure 5.

Figure 7 is a perspective view showing the cooperating elements of a modified form of the device applied to an elevating tape of the blind in position of non-use.

In general, the principle on which the device or devices of this invention operate will be clear from the following description.

The slats are placed in the conventional blind so that the upper and lower rails and the side edges of the slats are disposed generally in the form of a parallelogram. The angles are always the same in the standard Venetian blind operating by means of any standard tilt construction. The present device when applied, changed this parallelogram to form a trapezoid wherein, the lines taken along the side edges of the slats are parallel to each other, but the top and bottom rails are at different angles. It is to be noted that in actual operation the devices do not form a perfect trapezoid but portions of those tapes opposite to the tapes to which the devices are attached are in different planes.

Referring to the drawing, Figures 1 to 6 inclusive, a window frame is generally indicated at 10. The elevating mechanism of the blind is not shown since it may be of any conventional well known form operated by means of a cord 11. As shown, an upper rail 12, is provided tiltably mounted in the upper support 13 of the blind. Tilting is accomplished by means of a tilting cord 9. Spaced pairs of tapes 14, are provided, the tapes of each pair having their upper ends fixed to the opposite edges of the head rail. The lower ends of these tapes are fixed to the lower rail 15, in the same manner.

In accordance with the conventional practice, parallel cross tapes 16 are provided for each pair of tapes thus forming a structure, resembling a ladder, for supporting the slats. The slats them-

selves are loosely suspended on the cross straps being uniformly spaced, whereby adjacent slats, in the absence of the present device, may be described as forming parallelograms. Elevating cords extend from the mechanism within the upper support 13 and are attached to the bottom rail, being raised and lowered by means within the support 13 operated by the cord 11.

In one embodiment of the present invention cooperating or component clip parts 17, 18, are attached to the respective elevator tapes at the inside of the blind, midway of the lengths thereof. One of the parts is a hook 17, and the other, an eyelet or cross bar element 18 engageable over the hook. These elements are secured to the tapes by rivets 19 and normally spaced apart a sufficient distance to take up or snub a portion of tape substantially equal in length to the spacing of the respective slats. In other words the tape is snubbed and the snubbed portion 20 is disposed between the slats. This changes the angle of all slats below the clips with respect to all slats above the clips.

In the device of Figure 7, the clips are adjustable along the tapes. Each element is formed by stamping and includes parallel slots 21 disposed crosswise to the tape and through which the tape is laced. One element provides an eyelet tang 22 and the other a hook tang 23 cooperating in the same manner as the hook and eye of the first embodiment. The elements of the last described device may be moved up and down the tapes to any desired position.

By manipulating the tilting cord, the positions of the slats above and below the clips may be reversed (see Figures 2 and 3). The section of slats below the clips may be in closed position and the upper section open as in Figure 2. This gives ample light through the fully opened upper slats and at the same time maintains the privacy of the room.

If the user wishes the light, through the lower section operation of the tilting cord will move the slats to the position of Figure 3 and the lower slats are fully opened for procuring a maximum amount of light through the lower section and the slats of the upper section are fully closed for blocking the light through the upper section. The latter is of course desirable in instances where the sun rays coming through the upper section might be undesirable in the room. There are, of course, variations between these extreme positions which will place all slats in slightly opened positions despite the difference of angular position.

Having described my invention, I claim:

1. A Venetian blind control device consisting of a pair of component parts adapted to be fastened together, said parts including parallel slots through which the particular supporting tape of the Venetian blind may be laced, said component parts therefore adjustable relative to each other on the tape, and including portions cooperating for holding the parts together and snubbing a portion of the tape therebetween.

2. In a Venetian blind including slat supporting ladders, a device adapted to be attached to the tapes of the ladders on the inside of the blind and including parts having cooperating portions for clipping the parts together and snubbing the tape therebetween.

3. A device for controlling the angular positions of the slats of Venetian blinds and adapted to be associated with the supporting tapes thereof, comprising a pair of elements adapted to be secured to any one of the tapes in spaced relation, and including component portions adapted for attachment together for shortening the tape thereby changing the angular positions of all slats below the device with respect to all slats above the device.

4. A Venetian blind control apparatus, including the supporting tapes of the blind providing cross supporting tapes and slats supported upon said supporting tapes, a pair of cooperating hook elements fixed to each of the tapes on one side of the blind and adapted to be secured together when drawn toward each other, for snubbing the tape when fastened together and tilting the slats below the elements with respect to the slats above the elements.

5. A Venetian blind control device, comprising, a pair of cooperating elements adapted to be hooked together, said elements including attachment means for securing the same to the elevating tape of the Venetian blind.

6. A device for controlling the angular positions of the slats of Venetian blinds, adapted to be associated with any one of the slat supporting tapes thereof, comprising a pair of elements adapted to be secured to the particular tape in adjustably spaced relation and including component hook portions adapted for attachment together for shortening the tape for changing the angular positions of all slats below the device with respect to all slats above the device.

7. A Venetian blind control device, consisting of a pair of elements cooperating for snubbing the elevating tape of the Venetian blind.

8. A Venetian blind control apparatus including the supporting tapes of the blind providing cross supporting tapes and slats supported upon said supporting tapes, a pair of cooperating hook elements having slots therein through which the tape is disposed, said elements adapted to be secured together when drawn toward each other and snubbing the tape when fastened together and tilting all of the slats below the elements with respect to the slats above the elements.

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