

July 27, 1943.

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2,325,458

VENETIAN SLAT UNIT

Filed July 15, 1940

Fig. 1.

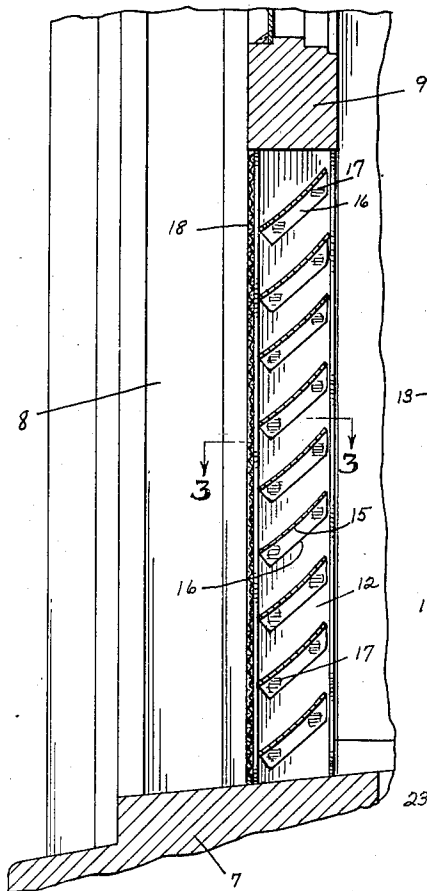


Fig. 2.

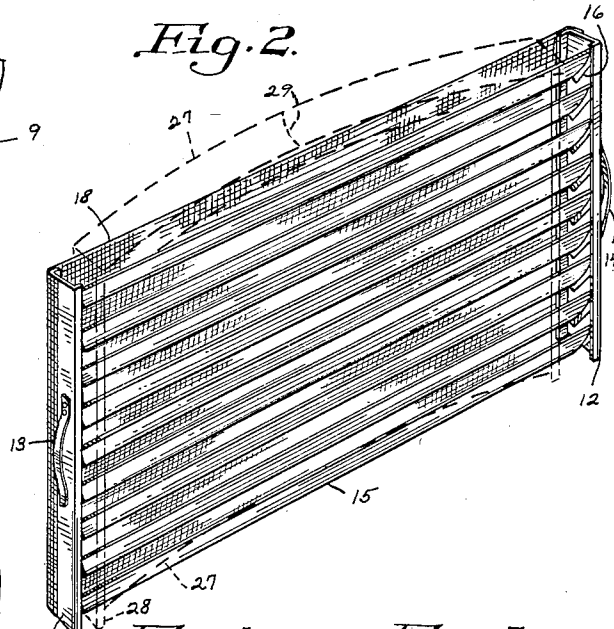


Fig. 4.

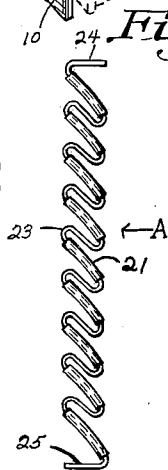


Fig. 5.

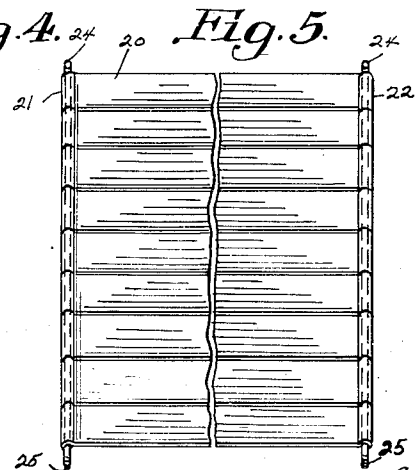
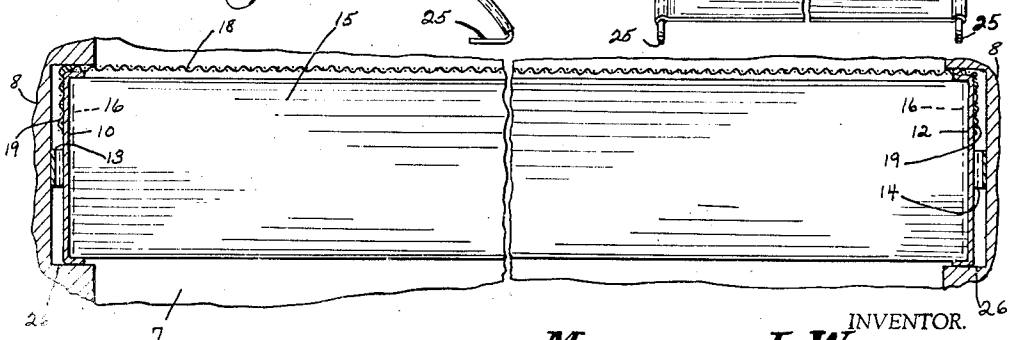


Fig. 3.



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2,325,458

VENETIAN SLAT UNIT

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Application July 15, 1940, Serial No. 345,453

12 Claims. (Cl. 98—99.8)

My invention relates to a Venetian slat unit and more particularly to a unit comprising a series of Venetian slats, which may be inserted in and removed from a window opening, as an entirety. An object of the invention is to provide a series of metal Venetian slats in such a unit, which may be easily flexed laterally, in order to insert the unit in place and to remove same.

Another object of the invention is to provide screen means on such a unit, whereby to exclude flies and other insects, but to permit the passage therethrough of light and air. Other objects are to provide such a unit that is convenient in use, is of improved structure, is easily installed and removed from its operative position, economical of manufacture, relative simplicity and general superiority in serviceability.

The invention also comprises novel details of construction and novel combinations and arrangements of parts, which will more fully appear in the course of the following description. However, the drawing merely shows and the following description merely describes one embodiment of the present invention, which is given by way of illustration or example only.

In the drawing, like reference characters designate similar parts in the several views.

Figure 1 is a broken, vertical section of an embodiment of my invention, in its proper position for use.

Figure 2 is a perspective view of the present Venetian slat unit, shown removed from a window opening.

Figure 3 is an enlarged, broken section taken on the line 3—3 of Figure 1.

Figure 4 is an end view of a modified construction of the unit.

Figure 5 is a broken, front elevation, looking in the direction of the arrow A of Figure 4.

Referring more in detail to the drawing, the reference numeral 7 designates a window sill upon which jambs 8 are mounted. A sash 9 is slidable in the window frame.

The embodiment shown in Figures 1 to 3 comprises channelled end members 10 and 12, whose channels face each other. Flat springs 13 and 14 are respectively mounted on the outer faces of the end members 10 and 12, in order that the unit may be firmly and resiliently held in place between opposed channels 8 of the window frame.

Spanning the space between the members 10 and 12 is a series of metal Venetian blind slats 15. The slats shown comprise a single thickness of material, which are continuously and gradually curved from edge to edge, producing

convex and concave sides. Each slat is capable of being folded upon itself and when released assume its original shape. The unit may be arranged with either side up in order that either the concave or the convex side of the slats is uppermost.

The ends of the slats are bent at an angle to provide flanges 16 that may be spot-welded against the inner face of the channel end members 10 and 12. Spot-welds are suggested at 17.

In order to keep out flies and other insects, a screen 18 may be arranged across a side of the unit. Ends 19 of the screen are welded on the outer faces of the end members.

The modified construction shown in Figures 4 and 5 comprises a series of slats 20 having their ends 21 and 22 bent around angularly disposed portions of wires 23 bent in zigzag form, as best shown in Figure 4. The ends 24 and 25 of the wires 23 are bent substantially parallel but in opposite directions.

Each embodiment is constructed in order that it may fit within the width of a window frame. The sash is then lowered into contact with the upper edge of the unit. When in place, the unit provides an attractive arrangement of Venetian slats that permits the entrance of light and air but keeps out flies and other insects.

In order to insert the unit into grooves in the window jambs, such as shown at 26, the slats are flexed laterally, as shown by broken lines 27. This flexing shortens the length of the unit, as suggested at 28, whereby it may be inserted into the grooves 26 in the window jambs. A flexing line in a slat is suggested at 29. The springs 13, 14 provide a snug fit and prevent rattling of the unit when in place. The window screen 18 is flexed with the slats.

The form shown in Figures 4 and 5 is inserted in the window frame by similar method, to wit, flexing the slats 20 laterally and permitting the resilience of the slats to snap the end wires 23 in position in the grooves in the jambs.

In each form the resilience of the slats tends to snap the unit in the positions described. Removal of either form is performed by flexing the slats and removing the end members (whether they are channel shaped or wires bent in zigzag form) from the grooves 26.

It is believed that the simplicity of each of the forms of the present invention and the ease with which they are placed in operative positions will be apparent from the foregoing description.

While I have illustrated and described what I now regard as the preferred embodiment of my

invention, the construction is, of course, subject to modifications without departing from the spirit and scope of my invention. I, therefore, do not wish to restrict myself to the particular form of construction illustrated and described, but desire to avail myself of all modifications which may fall within the scope of the appended claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a Venetian slat unit for fitting in grooves of a window frame, a series of transversely curved metal Venetian blind slats normally longitudinally straight, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, and means spacing the slats apart at the ends thereof and arranged to fit in the grooves in a window frame, said means being otherwise freely movable, and the slats being engaged at their ends with said means and being otherwise free, and the resilience of the slats tending to hold the unit in grooves in a window frame, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

2. In a Venetian slat unit for fitting in a window frame, a series of transversely curved metal Venetian blind slats, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, and means arranged to fit in a window frame, the ends of the slats being fastened to said means, said means being otherwise freely movable and the slats being otherwise free and the resilience of the slats tending to hold the unit in a window frame, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

3. In a Venetian slat unit for fitting in grooves of a window frame, a series of transversely curved metal Venetian blind slats, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, and means arranged to fit in the grooves in a window frame, the ends of the slats being bent to form flanges and the flanges being fastened to said means, said means being otherwise freely movable and the slats being otherwise free and the resilience of the slats tending to hold the unit in grooves in a window frame, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

4. In a Venetian slat unit for fitting in a window frame, a series of longitudinally resilient Venetian blind slats, and means fastened in fixed relation to the ends only of the slats and arranged to fit in the sides of a window frame, said means being otherwise freely movable and the lengthwise resilience of the slats tending to resist dislocation of the unit with respect to the window frame, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

5. In a Venetian slat unit for fitting in a window frame, a series of horizontal, lengthwise resilient Venetian blind slats, side members fixed to the ends only of the slats to fit within a window frame, a flexible screen disposed across the unit and connected to only the side members, the said side members being otherwise freely movable and

the unit being laterally contractable and the resilience of the slats tending to return the unit including the screen to its original position when the unit is contracted, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

6. In a Venetian slat unit for fitting in a window frame, a series of transversely curved metal Venetian blind slats, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, side members fastened in fixed relation to the ends only of the slats and arranged to fit in a window frame, and spring means on said side members arranged to exert pressure against the window frame, the side members being otherwise freely movable and the slats being otherwise free to utilize their resilience to operate against said spring means, to place same under tension, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

7. In a Venetian slat unit for fitting in a window frame, a series of transversely curved metal Venetian blind slats, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, channel members arranged to fit in a window frame, the ends of the slats being fixed to said members in the channels thereof, the said members being otherwise freely movable and the slats being otherwise free and the resilience of the slats tending to hold the unit in a window frame.

8. In a Venetian slat unit for fitting in grooves of a window frame, a series of transversely curved metal Venetian blind slats, each slat being sufficiently flexible and resilient in a longitudinal direction to be bent upon itself and when released to resume its original shape, channel members arranged with their channels facing each other and their backs disposed to fit in the grooves of a window frame, the ends of the slats being bent substantially at right angles to form flanges and the flanges being spot welded within said channels, and a flexible screen disposed across the unit and connected only to said side members, the side members being otherwise freely movable and slats being otherwise free for lateral contraction of the unit and the resilience of the slats tending to return the unit including the screen to its original position when the unit is flexed and inserted in said grooves in the window frame.

9. In a Venetian slat unit for fitting in a window frame, a series of lengthwise flexible resilient Venetian blind slats, and wires of zigzag form presenting angular portions in fixed relation to the ends only of the slats, and the unit being arranged to fit in a window frame, the slats being otherwise free to flex and the resilience of the slats tending to resist dislocation of the unit with respect to the window frame.

10. In a Venetian slat unit for fitting in a window frame, a series of lengthwise flexible resilient Venetian blind slats, and coiled wires of zigzag form presenting angular portions arranged to fit in a window frame, the end portions of the slats being bent around angular portions of the wire, the resilience of the slats tending to resist dislocation of the wires with respect to the window frame.

11. In a Venetian slat unit for disposition in

a window frame, a series of thin flexible slats, and side uprights to which the slats are fixed at their ends for spacing the slats in the series, the slats being otherwise free to flex in the direction of their lengths and the side uprights being otherwise freely movable and thereby shiftable toward and away from one another to facilitate in placing the unit within, and removing the same from, a window frame, said means being sufficiently rigid in itself so as to support the slats in spaced 10

relation when the unit is released to resume its original shape.

12. A Venetian slat unit as set forth in claim 11, wherein the slats are transversely curved to normally prevent sagging thereof in the series, said means being sufficiently rigid in itself so as to support the slats in spaced relation when the unit is released to resume its original shape.

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