May 2, 1950 N. H. KIATTA 2,506,507

VENETIAN BLIND

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Fig. 1.

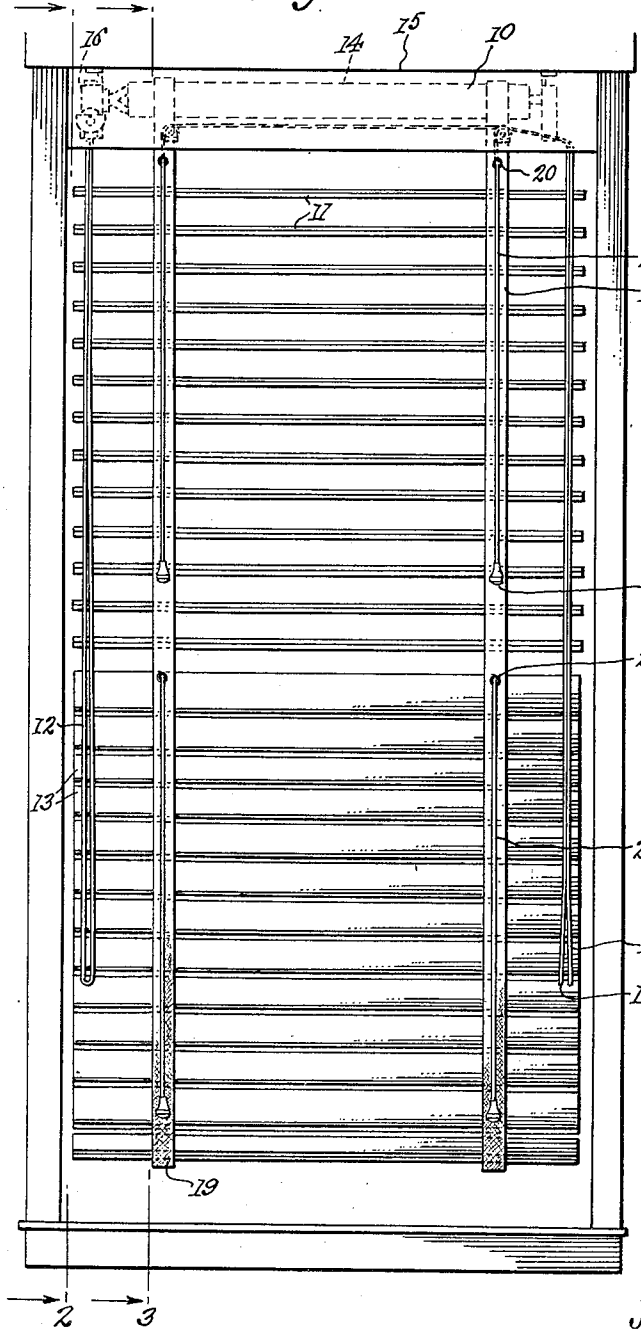


Fig. 2.

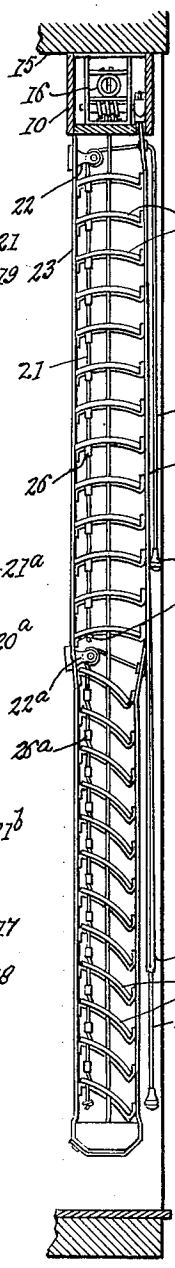
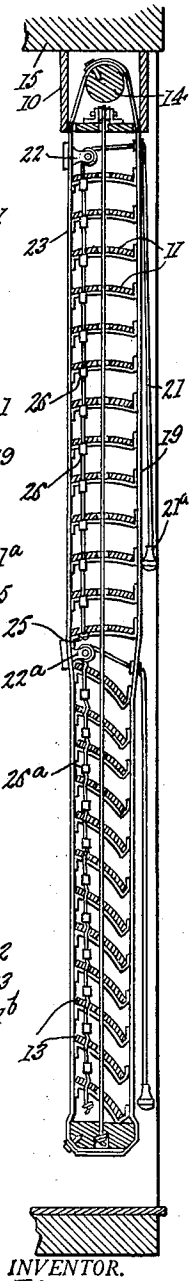


Fig. 3.



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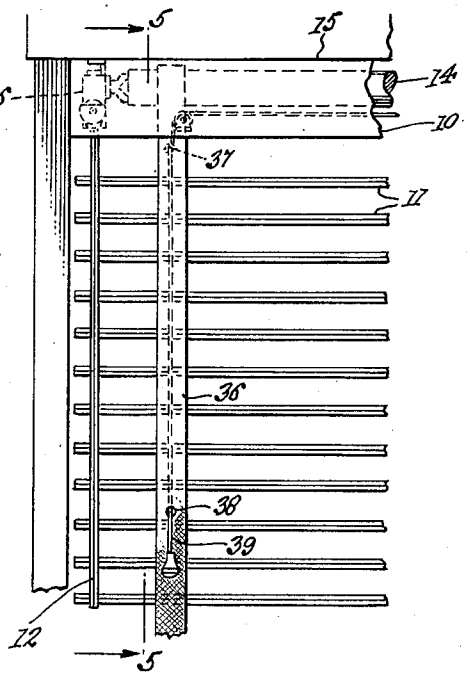


Fig. 4.

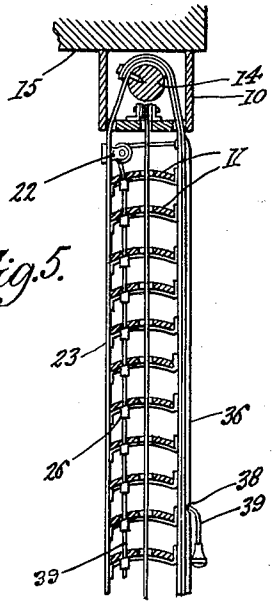


Fig. 5.

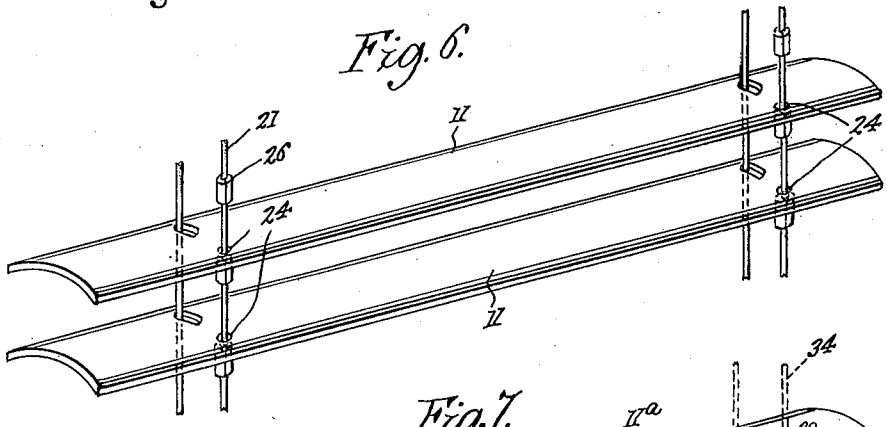


Fig. 6.

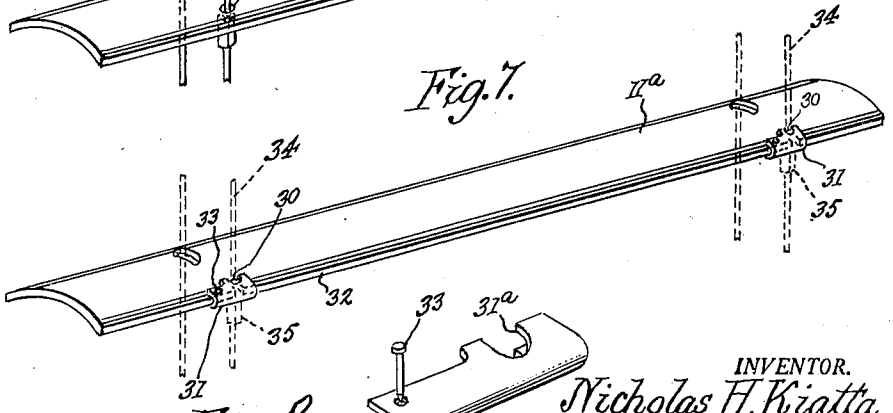


Fig. 7.

Fig. 8.

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VENETIAN BLIND

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7 Claims. (Cl. 160—115)

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The present invention relates to a Venetian blind, and more particularly to a Venetian blind which may be operated in sections.

In the operation of the conventional Venetian blind, the plurality of slats are operated as a unit. As a result, it is impossible to have the slats of a certain section of the Venetian blind adjusted to let in air and light, while the slats of the remaining section are closed to give the desired privacy.

It is therefore, the primary object of the present invention to provide the means associated with a Venetian blind so that the blind may be operated in sections.

Another object of the invention is to provide a slot for a Venetian blind which has a front and rear slot in substantial horizontal alignment.

Still another object is to provide a tape for use in a Venetian blind, in combination with a pulling rope, which comprises a front and rear portion, both of which have apertures so as to permit the pulling rope to pass between said front and rear portions so as to conceal it throughout the major part of its length and generally make a more attractive appearance.

Other and further objects and advantages of this invention will be more fully apparent from the following description thereof.

In the drawing, wherein like numerals refer to like or corresponding parts throughout the several views,

Figure 1 is a front elevation of the Venetian blind, embodying the features of the present invention, and showing the upper section of the blind open, and the bottom section closed.

Figure 2 is a sectional view taken along the line 2—2 of Figure 1, in the direction of the arrows,

Figure 3 is a sectional view taken along the line 3—3 of Figure 1, in the direction of the arrows,

Figure 4 is a fragmentary front elevation of a modified form of the invention showing the major portion of the pulling rope concealed in the tape,

Figure 5 is a side elevation of the modified form of the invention shown in Figure 4,

Figure 6 is an enlarged detail of the slat employed in the Venetian blind structure,

Figure 7 is an enlarged view of a modified form of a slat adapted for use in this invention, and

Figure 8 is an enlarged perspective view of the closure clip shown in Figure 7.

Referring to the drawing, the numeral 10 generally represents a Venetian blind structure, having the conventional means of opening and closing the slats 11 as a unit. By operation of the main cord 12, the slats 11 and 13 can be either opened or closed as a unit. The mechanism for accomplishing this result, is conventional in nature, and does not form a part of the present invention. Consequently, it has not been described or shown in detail, but generally comprises a roller 14 concealed in a box 15, with said roller 14 being operated through gearing and roller mechanism indicated by the numeral 16.

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Also in conventional manner, the slats 11 may be raised through means of the cords 17 and 18 which cooperate with the roller 14 and the mechanism 16. By pulling the cords 17 and 18 downwardly the slats 13 and 11 are successively picked up and moved upwardly as a single unit.

The present invention embraces the feature of providing auxiliary means which are adapted for use in a conventional Venetian blind, which will permit the operation of slats 11 in section.

There is provided front tapes 19 which are secured to the roller 14, with each being provided with an aperture 20 at the upper ends thereof. Ropes or cords 21 pass through the aperture 20 and over a pulley 22 which is secured to the rear tape 23 and then downwardly through holes 24 in the slats 11. The ropes or cords 21 extend through a limited number of slats 11 and terminate in a knot or other enlarged portion 25 which is sufficiently large so that it will not pass through apertures 24 disposed in slats 11. Likewise, at spaced apart portions throughout the length of the cords 21, or the part thereof extending through the holes 24, there are provided enlarged portions 26 which may be either knots or clips secured to said cords 21. These clips 26 are sufficiently large in diameter so that they will not pass through apertures 24 when the cords 21 are pulled by their handles 21*a*. The general effect of pulling cords 21 by the handles 21*a* is to bring the clips 26 into contact with the underside of the rear portion of the slats 11 to angularly move the said slats 11 to closed position if desired.

Likewise, the lower section of the Venetian blind can be selectively operated, separate and distinct from the upper section.

The mechanism for operating the lower section of the Venetian blind is similar in structure to that employed in operating the upper section. There is provided a pulley 22*a* with cords 21*b* which pass through aperture 20*a*. The cords 21*b* pass through rear apertures disposed in the slats, and are additionally provided with enlarged portions 26*a*, all as described more fully

with reference to the operation of the top section of the Venetian blind.

Although I have described the Venetian blind as being operatable in two sections, it is obvious that three or more sections can be similarly operated, it being only necessary to duplicate the mechanism for operating one of said sections.

Referring more particularly to Figure 7, there is shown a modified form of the invention in which a rear slot 30 is provided in the slat 11*a*, which slot 30 is open at one end thereof. A closure means, generally indicated as 31 is secured to the edge 32 of the slat 11*a*, and is pivoted thereto by a pin 33. The closure means 31 is provided with a cutaway portion 31*a* to coincide with the rear slot 30. In such a construction, the ropes 34 can initially be more easily put into position for operation, by swinging the clip 31 open, inserting the ropes 34, and closing the clip. Secured to the cord 34 is a clip 35 which engages the underside of the slat 11*a* to selectively open or close the same, when the Venetian blind is operated.

Referring to Figures 4 and 5 of the drawing, there is shown a modified form of the invention, in which a double tape 36 is employed. The double tape 36 is otherwise similar to the tape 19, but is provided with an opening 37 in the upper rear portion thereof, and a lower opening 38 in the front portion thereof. The cord 39 enters the aperture 37 and passes between the double tape 36 and extends through the aperture 38. Thus, the major portion of the cord 39 is concealed from view, and generally the Venetian blind has a more attractive appearance.

Otherwise, the operation of the modified form of the invention shown in Figures 4 and 5 is identical to the operation of the invention shown in Figure 1.

It should be borne in mind that the present invention generally embraces the feature of providing a slat for a Venetian blind having two spaced apart pairs of slots, each of which comprises front and rear slotted portions, preferably in substantial horizontal alignment. The invention also embraces a Venetian blind adapted to be operated in section wherein pulling means cooperate with a plurality of slats to selectively move some of said slats while others remain at rest.

In the operation of the Venetian blind, which forms the present invention, the slats 11 are selectively opened or closed by operation of the cord 12. To close a certain section of the Venetian blind, in accordance with the present invention, the slats 11 are first moved to open position as shown in the upper section of the Venetian blind of Figure 1. With all the slats 11 in open position, either the upper or the lower half of the Venetian blind can be selectively closed by either pulling the cords 21 or 21*b*. It should be pointed out however, that the slats must be in the open position before they are adapted for sectional closing. Also, once a section of the slats has been closed, and it is desired to open the same, it is necessary to close all sections of the Venetian blind, and then simultaneously open all the slats through the operation of cord 12. After the Venetian blind is completely opened, any section thereof may then be selectively closed.

Modified forms of the present invention will be apparent to those skilled in the art and it is desired to be limited only by the claims appended hereto.

What I claim is:

1. In a Venetian blind adapted to be operated in sections, a plurality of slats, some of said slats each being provided with center and rear slotted portions intermediate the ends and center of the slat, aligned tapes at the sides of said slats adjacent the slots, the front tapes being provided with an aperture, a pulley carried by the rear tape, and a rope disposed in said rear slotted portions passing over said pulley and through the aperture in said associated tape, and said rope being enlarged at spaced apart portions throughout its length, said enlarged portions engaging the underside of the said rear slotted portions when said rope is pulled, whereby said some of said slats tilt while the remainder stay at rest.

2. In a Venetian blind adapted to be operated in sections, a plurality of slats, each of which is provided with center and rear slotted portions intermediate the ends and center of the slat, aligned tapes at the sides of said slats adjacent the slots, the front tapes being provided with an aperture, a pulley carried by the rear tape, and a rope disposed in said rear slotted portions of some of said slats and passing over said pulley and through the aperture in said associated tape, and said rope being enlarged at spaced apart portions throughout its length so that said enlarged portions engage the underside of the said rear slotted portions of some of said slats when said rope is pulled, whereby said some of said slats tilt while the remainder stay at rest.

3. In a Venetian blind adapted to be operated in sections, a plurality of slats, some of said slats being provided with center and rear slotted portions, pulling means cooperating with said rear slotted portions of said some of said slats to operate the same.

4. In a Venetian blind adapted to be operated in sections, a plurality of slats, some of said slats being provided with center and rear slotted portions in substantial horizontal alignment, rope and pulley means cooperating with said rear slotted portions of said some of said slats to operate the same.

5. A tape for use in a Venetian blind in combination with a pulling rope, said tape having a front run comprising, a rear portion having an aperture, and a front portion having an aperture spaced from said first mentioned aperture in said rear portion, whereby said pulling rope may enter through the aperture in said rear portion of the tape and pass between the front and rear portions of the tape to pass through the aperture in the front portion of said tape.

6. In a Venetian blind adapted to have its slats operated to closed position in sections, a plurality of slats in each section, tapes associated with said slats and having front runs and back runs, a pulley mounted upon the back run of each tape, the front run of each tape having an aperture therein, and a rope having one end portion passing through the aperture in the front run of each tape and having its opposite end portion passing over said pulley and being operatively connected to each of the slats in one of said sections.

7. In a Venetian blind having upper and lower sections each comprising a plurality of slats, tapes associated with the slats of both sections and having front runs and back runs, a pulley mounted upon the back runs of said tapes adjacent the upper end portions thereof, the front runs of said tapes having apertures in the upper end portions thereof, ropes having end portions passing through the apertures of the front runs of the

tapes and being disposed outwardly thereof, the opposite end portions of said ropes being trained over said pulleys and being operatively connected with the slats in the upper section of the Venetian blind, whereby the slats of the upper section may be tilted to closed position by pulling on the outer ends of said ropes, pulleys mounted upon the back runs of said tapes intermediate the upper and lower ends thereof, the front run of said tapes having apertures disposed intermediate the upper and lower ends of said tapes, and ropes having end portions thereof passing through the intermediate apertures in said tapes and being disposed outwardly thereof and having their opposite end portions trained over said intermediate pulleys, and having operative connections with the slats in the lower section of the Venetian

blind, whereby the slats of the lower section may be tilted to closed position independently of the slats of the upper section by pulling on the ropes which are operatively connected to the slats of the lower section.

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REFERENCES CITED

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

UNITED STATES PATENTS

Number	Name	Date
2,116,356	Laborda	May 3, 1938
2,170,938	Carreras	Aug. 29, 1939
2,292,338	Levy	Aug. 4, 1942