Feb. 8, 1944. H. F. NORTON 2,341,233

VENETIAN BLIND STRUCTURE

Filed Oct. 4, 1943

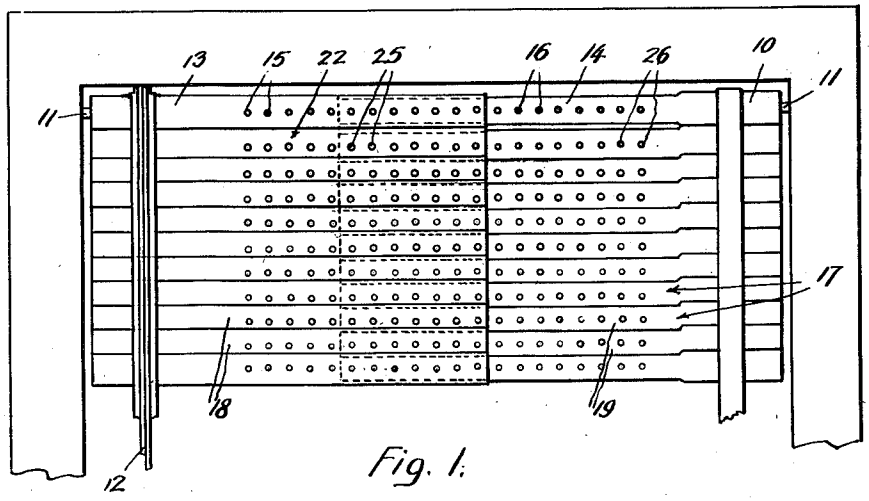


Fig. 1.

Fig. 2

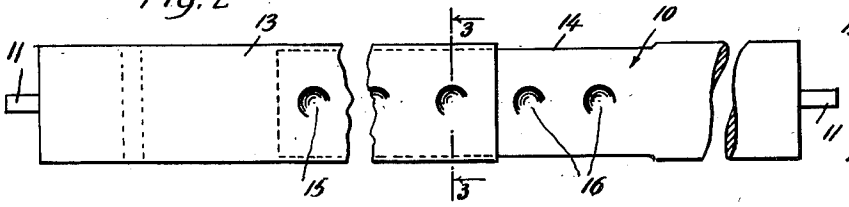


Fig. 3.

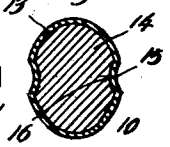


Fig. 4.

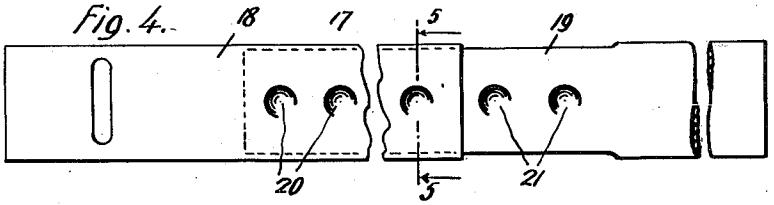


Fig. 5.

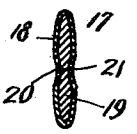
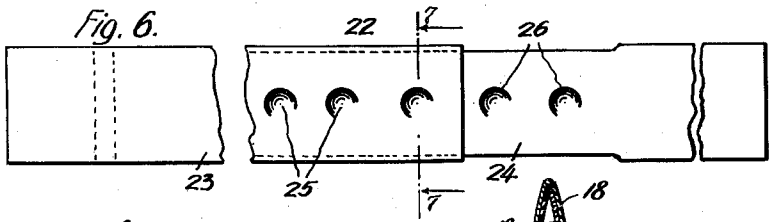


Fig. 6.



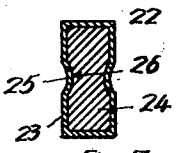


Fig. 7.

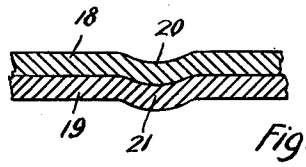


Fig. 8.

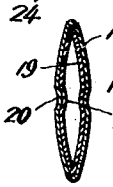


Fig. 9.

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VENETIAN BLIND STRUCTURE

Hazel F. Norton, Chicago, Ill.

Application October 4, 1943, Serial No. 504,935

4 Claims. (Cl. 160—236)

The present invention is a curtain structure, and relates particularly to that type of curtain known generally as Venetian blinds.

The Venetian blind, as at present constructed, includes a plurality of thin slats arranged crosswise of the window opening, capable of being raised or collapsed one upon the other, maintained at different desired heights, and also capable of being tilted to the desired degree or angle to control vision through the blind as well as the intensity of light through the window opening. The means for controlling the movements of the blind may vary, but usually includes cord, wires and tape for accomplishing these ends.

While it is the practice to construct Venetian blinds of such length as to be accommodated within standard sizes of window openings, it frequently happens that one possessed of blinds of one length desires to apply them to window openings of other sizes. As this cannot be done in any practical manner at present, it becomes necessary to obtain, at some considerable expense, additional blinds. Moreover, it happens not infrequently that some houses or buildings are provided with window openings of abnormal size, in which event Venetian blinds must be specially made to fit such openings.

The present invention provides means whereby a Venetian blind may be so constructed as to be adaptable to window openings of various sizes, and furthermore to provide a blind structure which may, with ease and by simple operations, be expanded or contracted as required and automatically held in its proper position of adjustment.

The invention has to do only with the construction of the blind slats, rocking bar and top and bottom pieces so that they may be extended or contracted, and the manner of mounting the screen and the mechanism relied upon for carrying out the various raising, lowering and tilting functions form no part of the invention.

The invention will be best understood with reference to the drawing, wherein:

Figure 1 is an elevational view of the upper part of a conventional window opening and illustrating as applied thereto a Venetian blind structure involving the invention,

Figure 2 is an enlarged fragmentary elevation of a conventional rocking bar and illustrating the inventive idea as applied thereto,

Figure 3 is a transverse sectional view taken substantially upon the line 3—3, of Figure 2,

Figure 4 is an elevation, parts broken away, of the face view of one of the slats involving the invention,

Figure 5 is a transverse sectional view on the line 5—5 of Figure 4,

Figure 6 is a fragmentary elevational view of a top or bottom bar involving the invention,

Figure 7 is a transverse sectional view taken upon line 7—7 of Figure 6,

Figure 8 is an enlarged detail sectional view illustrating the manner in which hollow telescoping slat members interlock with one another, and

Figure 9 is a transverse sectional view showing a blind slat consisting of hollow telescoping sections.

Referring now more particularly to the drawing, 10 indicates a familiar type of rocking bar supporting the screen structure, having trunnions 11 suitably secured in the sides of the window frame and near the top thereof. This bar is usually of oval form as shown in Figure 3, and its tilting action is usually controlled by a cord indicated at 12. This bar is made in sections represented at 13 and 14, which sections are arranged to slide longitudinally one upon the other. The section 13 may be made of thin metal or composition material as will be understood, and is hollow preferably throughout its length in order to snugly but slidably accommodate therein the companion section 14. The section 14 may be solid or may be hollow, as desired, and each of the sections is provided with a longitudinal series of depressions or recesses 15 and 16 to releasably engage with one another. These depressions are spaced apart even distances in order that several of the depressions may be interlockingly engaged at a time to insure the sections against maladjustment. The recesses, furthermore, are arranged in sufficient number to permit a wide latitude of adjustment of the sections one upon the other.

In Figures 4 and 5, there is illustrated in detail the construction of the Venetian blind slat represented generally at 17, which slat includes the sections 18 and 19 slidably engaged with one another. The section 18 is hollow throughout substantially its entire length and telescopically receives the section 19. Each of the sections is provided with longitudinal series of depressions 20—21 to interlockingly engage with one another to facilitate the adjustment.

Figures 6 and 7 are details of the top and bottom bars for the usual Venetian blind, which bars are represented generally at 22. The bar is also made in sections 23—24, the former of which is hollow to slidably receive the section 24. These sections are also equipped with longitudinal series of interlocking depressions

25—26 similar to those of the other elements of the Venetian blind structure.

Figures 3, 5 and 7 show transverse sectional views through the above described elements of the Venetian blind, which elements here shown include a solid inner section slidably engaged in the hollow outer section. It will be understood, however, that the invention is not confined to a solid inner section, as both sections may be hollow as shown in Figures 8 and 9. Where this is desired, it will be understood that the sections will be made of thin metal or sufficiently rigid and strong composition material, and the sections will be so made as to permit of free sliding movement relative to each other except when the depression members are interengaged, in which event the said sections will be held firmly against accidental movement.

The invention here disclosed shows depressions upon both sides of the several elements comprising the screen structure, but it will be understood that if desired the depressions may be confined to one side only without detracting from the operativeness or practicability of the device. It will also be understood that the tilting bar, upper and lower bars and slats may take forms and shapes other than those herein shown, as the inventive idea is not necessarily restricted to the specific forms here disclosed.

From the foregoing, it is apparent that a blind so constructed may be quickly and easily adjusted to accommodate itself to windows or openings of various widths within limits, and that once adjusted the blind will function in the same manner as if the slats and other component parts were of but a single piece.

I claim:

1. In a blind structure, a bar usable as a tilting bar or one of a series of parallel slats, said bar comprising telescopic sections the outermost of which wholly encompasses the inner section, and cooperating means on said sections for maintaining them in adjusted positions.

2. In a blind structure, a bar usable as a tilting bar or one of a series of parallel slats, said bar comprising sections telescopically interfitting to permit of longitudinal adjustment, the outermost of said sections wholly enclosing the inner section, one of said sections having a longitudinally disposed series of depressions, and a detent on the other of said sections to engage and interlock with the depressions of said first named sections.

3. In a ventilating blind structure, a bar usable as a tilting bar or one of a series of tiltable slats, said bar comprising sections telescopically interfitting and being longitudinally adjustable, the outermost of said sections wholly enclosing the inner section, said inner section having a series of spaced depressions disposed longitudinally of the section, and detents on the outer section adapted to engage in said depressions to hold said sections in adjusted positions.

4. A blind slat structure, comprising inner and outer sections, said outer section being hollow throughout at least a part of its length to snugly receive the inner section in telescopic relation, said inner section having a plurality of spaced depressions in one side disposed longitudinally of the section, and a plurality of spaced detents arranged in longitudinal series in a side of the outer section to releasably engage in the depressions of said inner section.

HAZEL F. NORTON.