

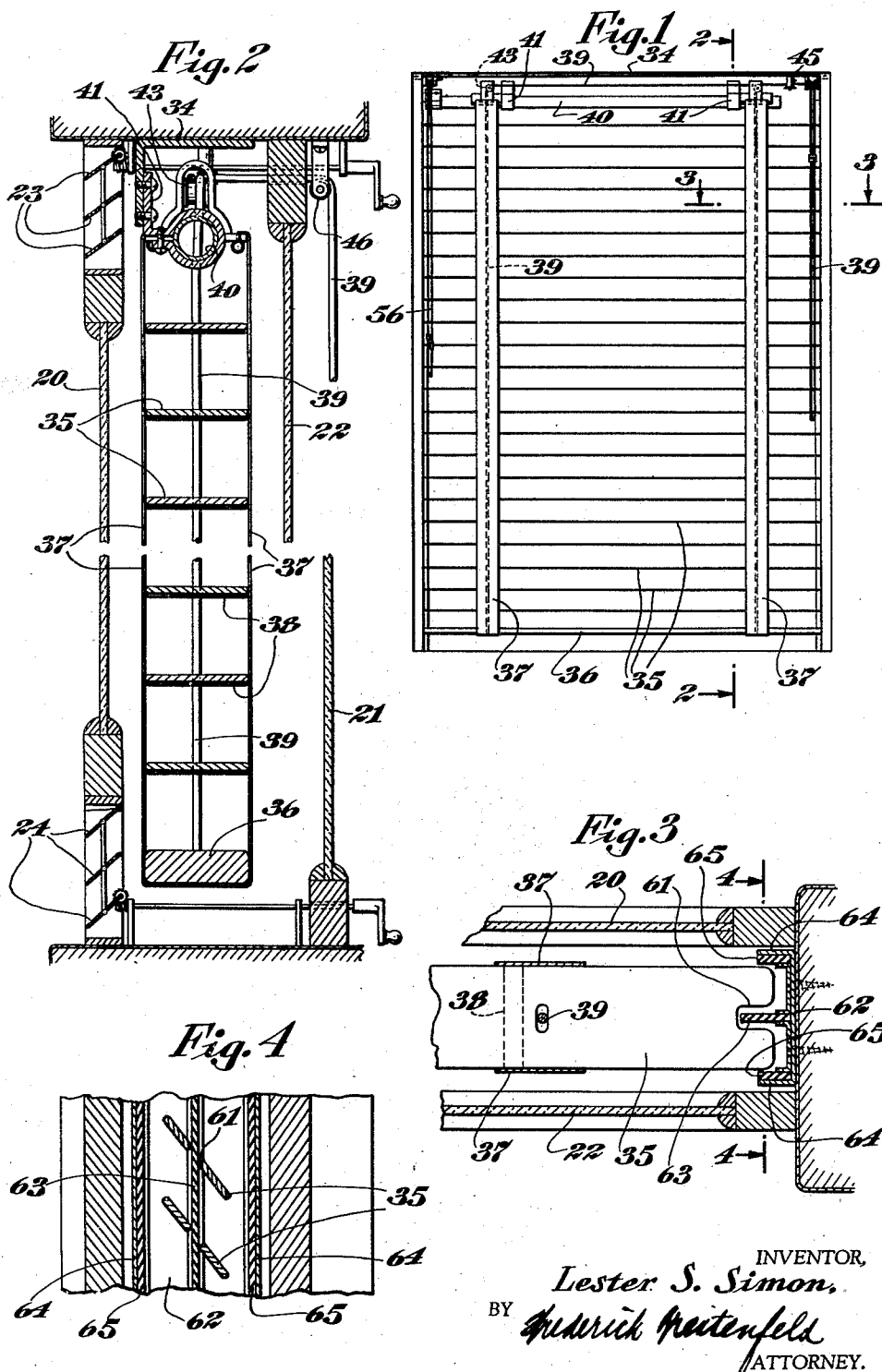
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VENETIAN BLIND

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VENETIAN BLIND

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4 Claims. (Cl. 156—17)

My present invention relates generally to Venetian blinds, and has particular reference to certain structural improvements.

A general object of the invention is to provide certain improvements in the means for guiding the slats.

A more particular object of the invention lies in the provision of improved guiding means which are so constructed and arranged as to minimize the chattering noise which is so characteristic of Venetian blinds in general. In accordance with my invention, this object is achieved by providing each slat with at least one notch in each end thereof, and in associating the slats with lateral guides which cooperate with the notched slat ends, the guides presenting surfaces of noise-deadening material.

The invention aims generally to provide an improved Venetian blind construction of workmanlike character, attractive appearance, and of simple and economical nature.

I achieve the foregoing objects, and such other objects as may hereinafter appear or be pointed out, in the manner illustratively exemplified in the accompanying drawing, wherein—

Figure 1 is an elevational view of a Venetian blind installation embodying the features of the present invention;

Figure 2 is a cross-sectional view on an enlarged scale, taken substantially along the line 2—2 of Figure 1;

Figure 3 is an enlarged fragmentary cross-sectional view, taken substantially along the line 3—3 of Figure 1; and

Figure 4 is a fragmentary cross-sectional view taken substantially along the line 4—4 of Figure 3.

In Figure 2, I have shown two parallel, spaced windows, with the Venetian blind mounted in the heat-insulating space between them. In the embodiment illustrated, the outer window 20 is a single fixed sash, whereas the inner window is of the double-hung variety having a lower sash 21 and an upper sash 22.

The Venetian blind is supported on an angle bracket 34 suitably mounted and secured in the upper portion of the space between the windows.

The Venetian blind consists of the well known slats 35, the lowest one of which, designated at 36, is somewhat heavier than the others. These slats are supported, in known manner, by means of tapes 37 having the transverse portions 38 which underlie the respective slats. The slats are provided with suitable openings to permit the passage therethrough of one or more lifting

cables 39, each cable being secured at its lower end to the bottom slat 36.

In the structure illustrated, a rod 40, preferably of circular cross-section throughout, extends across the top of the structure in a direction substantially parallel to the slats 35. It is secured to the bracket 34 by means of two or more clamps 41 which are spaced from each other and which serve as bearings within which the rod 40 is journaled for rotation about its own axis.

The rod 40 is provided with openings through which the lifting cables 39 pass, and these cables thereupon travel over pulleys 43, and thence in a substantially horizontal direction toward a fixed point at one side of the structure. At this point they are caused to pass around a pulley 45 which guides them toward the inner window. Passing through this window, they then extend over a guide pulley 46 and hang down in accessible position.

The rod 40 is tilted by cables 56 which pass over guide pulleys 57 and 58 and extend downwardly into accessible position, as shown in Figure 1.

In Figures 3 and 4, I have shown the improved guiding means for the slats. Each slat is provided at each end with at least one notch 61. In the illustrated preferred embodiment, this notch is centered with respect to the slat. Secured to the framework of the device is a bracket 62 which carries not only a medial rib 63, but also lateral ribs 64. The medial rib 63 extends into the notch 61, and the lateral ribs 64 extend into positions alongside of the outer edges of the slat 35. These ribs present surfaces of noise-deadening material, and in the preferred construction the rib 63 is composed, in its entirety, of this material, while the ribs 64 are lined with such material, as indicated by the reference numerals 65. This material may be rubber or any equivalent material of similar noise-deadening qualities.

The width of the notch 61 is substantially greater than the width of the rib 63. The longitudinal distance along each slat between the inner ends of the opposite notches 61 is only slightly less than the distance between the opposite medial ribs 63. And the portions 65 of each guide are spaced by an amount only slightly greater than the width of the slat.

The result is that chattering of the slats is almost completely prevented because, upon reference to Figures 3 and 4, it will be observed that inadvertent movements of the slat will always cause the latter to impinge upon a surface of

noise-deadening material. When the slats are in the normal position, as shown in Figures 2 and 3, endwise movement causes abutment against the ends of the ribs 63, and lateral movement causes abutment against the ribs 65. When the slats are tilted, as shown in Figure 4, the endwise movement is similarly cushioned, and lateral movement is cushioned by impingement of the sides of the notches 61 against the sides of the ribs 63.

10 The relatively great width of the notch 61 permits the slats to be tilted.

The noiseless construction and operation, resulting from the features illustrated in Figures 3 and 4, make the present Venetian blind of particular utility in railroad trains, buses, airplanes, and the like. The arrangement illustrated in Figure 2 is peculiarly advantageous where the room or chamber is air conditioned, since the heat-insulating air space between the two windows impedes the transmission of heat by conduction, and by mounting a shade or blind in this air space, the ingress of radiant heat is prevented. The slats of Figure 2, for example, if properly tilted, would reflect the radiant heat entering through the outer window and thereby prevent its passage through the inner window. To permit the radiant heat, thus reflected and accumulated, to be dissipated, the ventilating means illustratively exemplified by the louvres 23 and 24 is preferably provided.

30 In general, it will be understood that changes in the details, herein described and illustrated for the purpose of explaining the nature of my invention, may be made by those skilled in the art without departing from the spirit and scope of the invention as expressed in the appended claims. It is, therefore, intended that these details be interpreted as illustrative, and not in a limiting sense.

Having thus described my invention and illustrated its use, what I claim as new and desire to secure by Letters Patent is—

1. In a Venetian blind, a slat having a notched end, and a lateral guide for the slat comprising three spaced ribs, the middle rib projecting into said notch, the outer ribs being positioned alongside the opposite outer edges of the slat, said ribs presenting surfaces of noise-deadening material.

2. In a Venetian blind, a slat having a notched end, and a lateral guide for the slat comprising three spaced ribs, the middle rib projecting into said notch, the outer ribs being positioned alongside the opposite outer edges of the slat, said ribs presenting surfaces of noise-deadening material, and said notch having a width sufficiently greater than the width of said middle rib to permit the slat to be tilted.

3. In a Venetian blind, a slat having a notched end, and a lateral guide for the slat comprising three spaced ribs, the middle rib projecting into said notch, the outer ribs being positioned alongside the opposite outer edges of the slat, said ribs presenting surfaces of noise-deadening material, said outer ribs being spaced from each other by a distance only slightly greater than the width of said slat, and said notch having a width sufficiently greater than the width of said middle rib to permit the slat to be tilted.

4. In a Venetian blind, a slat having notched ends, and lateral guides for the slat, each guide having a rib projecting into the corresponding notch, said ribs presenting surfaces of noise-deadening material, and said ribs being spaced from each other by a distance only slightly greater than the distance between the inner ends of said notches.

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