July 31, 1951 R. K. FOX 2,562,781

VENETIAN BLIND

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FIG_1_

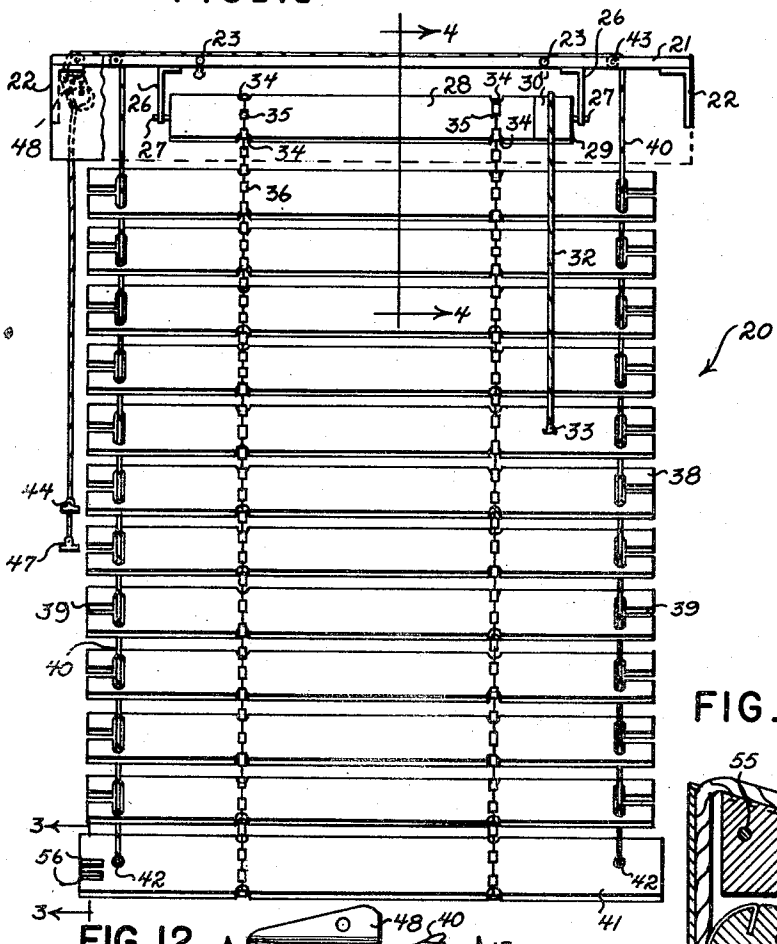


FIG_12_

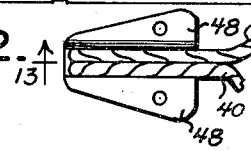


FIG_13_

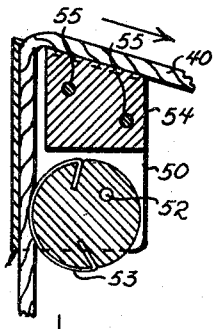


FIG_2_

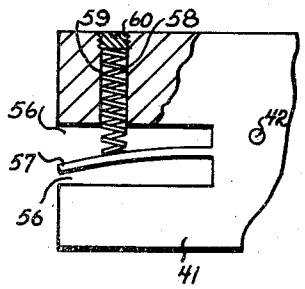


FIG_3_

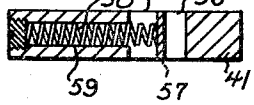
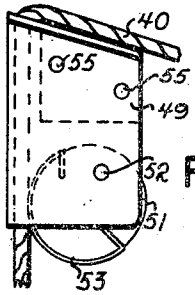


FIG_11_



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FIG_4_

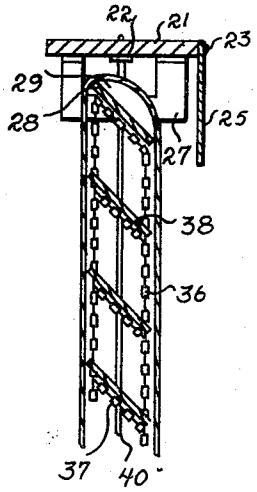


FIG_5_

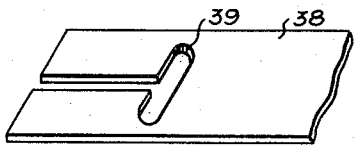


FIG_6_

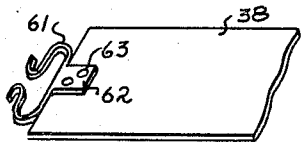


FIG_7_

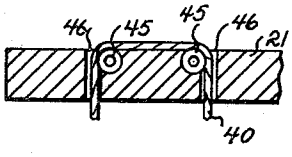


FIG_8_

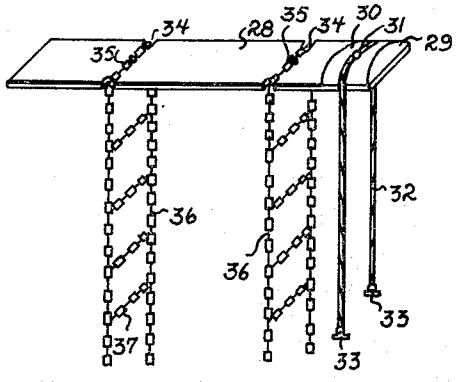


FIG_9_

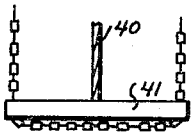
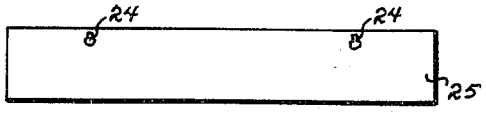


FIG_10_



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UNITED STATES PATENT OFFICE

2,562,781

VENETIAN BLIND

Ralph K. Fox, Cleveland, Ohio

Application November 20, 1946, Serial No. 711,082

1 Claim. (Cl. 160—174)

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This invention relates to improvements in Venetian blinds.

An object of the invention is to provide a Venetian blind that is simple in construction and durable in use, which will eliminate all the troubles that arise from the complicated mechanism that is used in present day Venetian blinds.

The blind, though simple in construction, will give the user thereof all the features of the more complicated type, and yet will not be subject to the drawbacks inherent to this type of blind.

Another object of the invention is to provide slats that are unique in construction, since they can be removed from the blind without removal of the drawcords therefrom.

With the above and other objects and advantages in view, the invention consists of the novel details of construction, arrangement and combination of parts more fully hereinafter described, claimed and illustrated in the accompanying drawings in which:

Figure 1 is an elevational view of an embodiment of the invention;

Figure 2 is a fragmentary sectional view of a lock for the pull cords;

Figure 3 is a sectional view on the line 3—3 of Figure 1;

Figure 4 is a sectional view on the line 4—4 of Figure 1;

Figure 5 is an enlarged detailed view of one end of a slat;

Figure 6 is an enlarged detailed view of one end of a modified form of slat;

Figure 7 is a sectional view of the head board along the mounting for one drawcord;

Figure 8 is a perspective view of the tilting board;

Figure 9 is a fragmentary detailed view of one end of the base or lifting board;

Figure 10 is an elevational view of the cornice board;

Figure 11 is a side view of a modified form of lock for the drawcord;

Figure 12 is a top plan view thereof and

Figure 13 is a sectional view on the line 13—13 of Figure 12.

Referring more in detail to the drawings, the reference numeral 20 designates in general the Venetian blind which comprises the head board 21, having brackets 22 secured to the ends thereof on the undersurface thereof, whereby the Venetian blind may be hung or supported at any suitable window or door opening.

On the outer longitudinal edge of the head board, are provided headed pins 23 which are

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adapted to be received in the key slots 24 in the cornice board 25 whereby the cornice board is suspended from the head board, and covers the upper or operating end of the blind.

Secured to the under surface of the head board, in relatively spaced relation to each other, are the brackets 26 which receive the trunnions 27 of the tilting board 28. Secured to one end of the board 28 on the upper surface thereof is the tilting mechanism which comprises the block 29 having a convex top 30 and a flat bottom to conform to the surface of the board 28. Secured to the top 30 of the block 29, at the center thereof, by means of the fastener 31, is the tilting cord 32 which, as is conventional, has two free ends on which are positioned draw knobs 33, and by pulling either of these knobs, the tilting board will be tilted in either direction as desired.

Inwardly of the block 29, the tilting board 28 is provided on each outer longitudinal end with relatively spaced notches 34 which receive the looped ends 35 of the chain ladders 36 which, by means of cross chains 37, support the slats 38 thereon in removable relation to the ladders.

Each end of the slat 38 is provided with a T-shaped slot 39 whereby the slats removably receive the draw cords 40. The draw cords 40, at their lower ends, are secured to the center of the lifting or baseboard 41 adjacent the outer ends thereof by passing through openings 42 in the board 41, and being knotted in the conventional manner.

The right hand cord passes upwardly through the head board 21 over pulleys 43 to extend downwardly from the head board to cover a pull knob 44 secured to the end thereof. The left hand pull cord passes over pulley 45 and through vertical openings 46 in the head board 21 to extend downwardly from the head board to have a pull knob 47 secured to the end thereof.

Mounted on the left hand bracket 22 below and in line with the openings 46 in the head board by means of ears 48 is the pull cord locking means 49, which comprises the housing 50 in which is mounted the cam 51 by means of the shaft 52, and the cam is provided with friction material 53 on the face thereof to engage the pull cords 40. A spacing block 54 secured in the housing 50 by rivets 55 permits free turning of the cam on the shaft 52.

On the left hand end of the lifting board 41, there is provided the spaced parallel slots 56, which form the tongue 57. The tongue 57 is tensioned by a coil spring 58 mounted in the bore 59

which is provided in the board **41** at right angles to the tongue **57**, and an adjusting screw **60**, in the bore **59**, retains the spring therein.

In Figure 6, the slat **38**, instead of having a tee slot **39** formed therein, for the pull cords **40**, has a spring clip **61** provided with ears **62** secured to the outer end thereof by rivets **63**, whereby the slats are removably mounted on the cords **40**.

The improved simplified features of the invention comprise the simple tilting block and its component parts.

The cam lock **51** for the pull cords, which is operated in the following manner: When the blind is raised by means of the pull cords, the cords are engaged with the friction material **53**, and as the cords are released, the cam locks the cords and retains the blind at any desired height. Upon release of the pressure on the cords, the cam will release from the cords, and the blind can be lowered.

The locking means on the end of the lifting or base board which engages the pull cords and retains the lift board at any desired height, and the chain ladders which replace the conventional types in use at the present time.

These chains eliminate the tapes which get dirty and dusty, and require removal for the cleaning thereof.

Also with the slats removable, the blinds are easily cleaned when necessary.

If desired, a rope ladder constructed similar to the chain ladder may be used, but the chain ladder is easier to clean, and will stay clean for a longer period of time.

There has thus been provided a Venetian blind that is simpler in construction and operation,

and it is believed that from the foregoing description, the invention will be apparent to those skilled in the art.

It is also to be understood that changes in the details of construction, arrangement and combination of parts may be resorted to, provided they fall within the spirit of the invention and the scope of the appended claim.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

In a tilt board for a Venetian blind the improvement comprising a pair of supporting brackets for the tilt board, a block having a convex top and flat bottom, the flat bottom of said block engaging the upper surface of the tilt board adjacent one end thereof, tilting cords secured to and engaging the convex top of said block and depending below said tilt board at opposite sides thereof, and said tilt board having relatively spaced slots therein for engaging slat supporting means.

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