

Jan. 30, 1931.

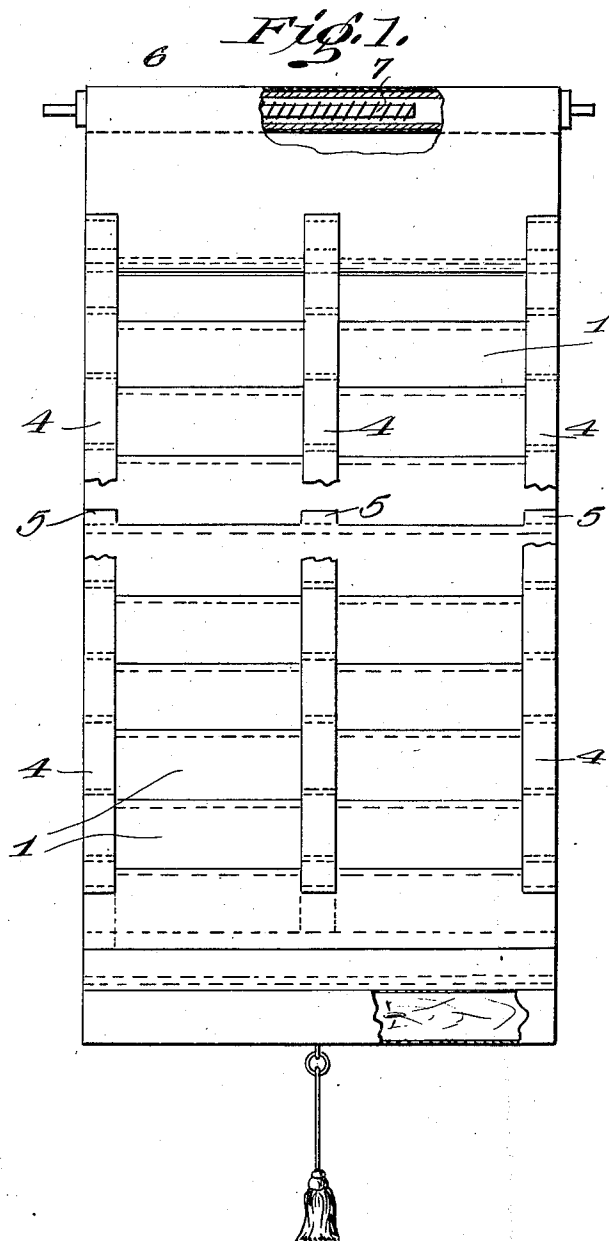
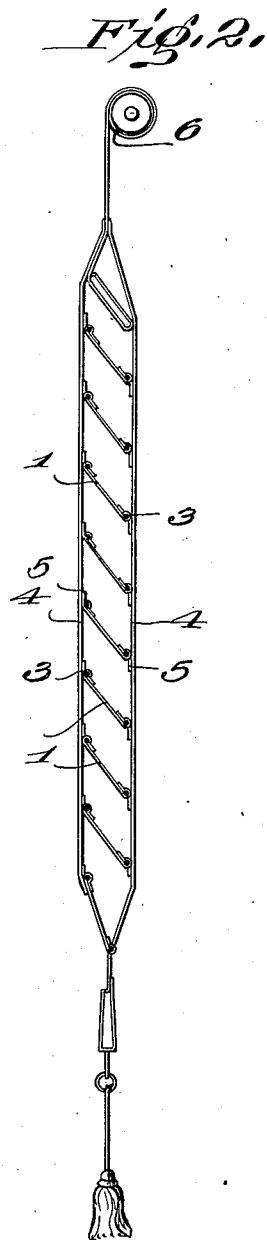
TOSHI-KO IWATA

1,789,655

WINDOW BLIND MADE OF WOVEN FABRIC

Filed July 6, 1929

2 Sheets-Sheet 1



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Jan. 20, 1931.

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1,789,655

WINDOW BLIND MADE OF WOVEN FABRIC

Filed July 6, 1929

2 Sheets-Sheet 2

Fig. 3.

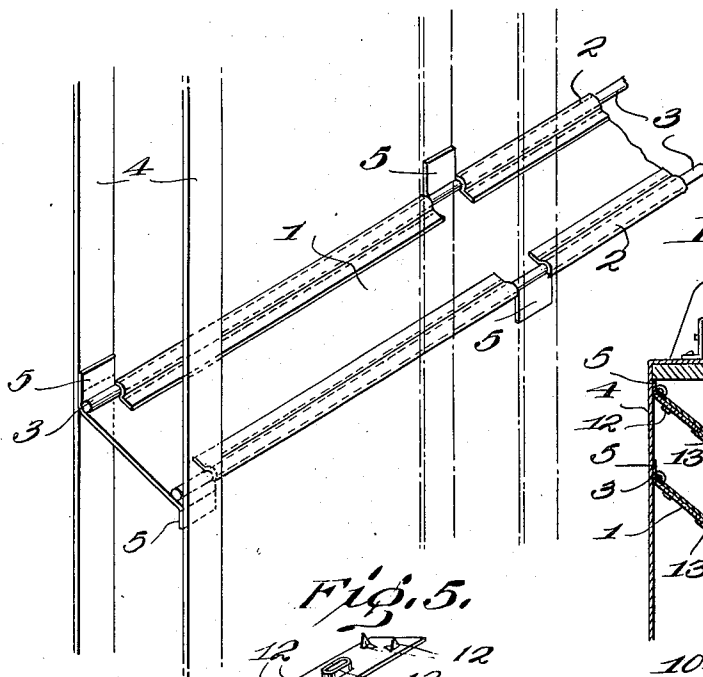


Fig. 4.

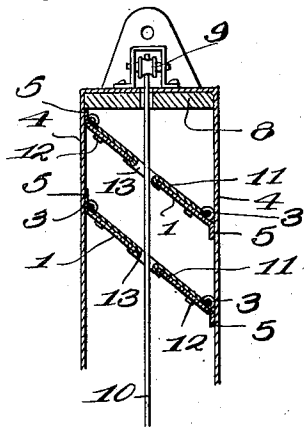


Fig. 5.

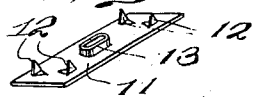
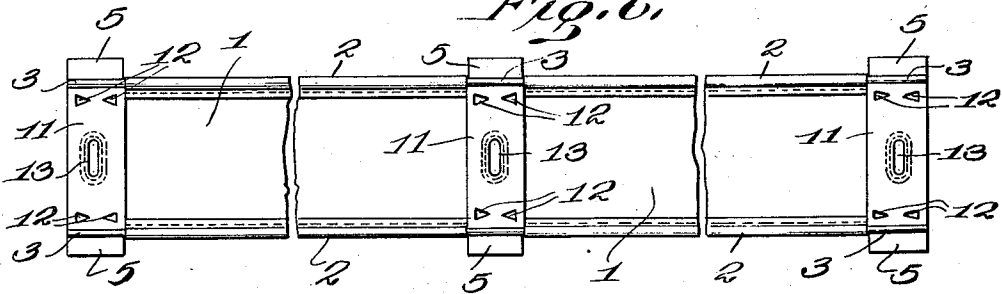


Fig. 6.



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UNITED STATES PATENT OFFICE

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WINDOW BLIND MADE OF WOVEN FABRIC

Application filed July 6, 1929. Serial No. 376,428.

My invention relates to a window-blind, and particularly to that made of strips of woven fabric.

The object of my invention is to provide a window-blind made of woven fabric, in which vanes are adapted to be effectively maintained in a stretched position being not crumpled, and yet it may be readily washed.

In the accompanying drawings forming a part of this specification, Figure 1 is one form of embodiment of my invention as applied to a rolling blind.

Figure 2 is a vertical sectional elevation thereof.

Figure 3 is a perspective view of one of the vanes.

Figure 4 is a part of the sectional elevation of the collapsible blind made according to my invention.

Figure 5 is a perspective view of one of the stretching members fixed to the vanes.

Figure 6 is a plan view of the vane with said stretching members.

According to my invention, the laths or vanes 1 of the blind are made of strips of stiff woven fabric of desired width and length. On both selvages of the fabric forming the vane are formed tubular edges 2 by sewing together the turned selvages with the vane proper. As shown in Figure 3, through each of the tubular edges 2 is detachably inserted a stretching frame or rod 3 made of steel, bambo, celluloid, or any other resilient material. At the points where the vane 1 is connected to the vertical connecting strips 4, flaps 5 are cut from the selvages instead of forming the tubular edges, and the said flaps 5 are united to the vertical connecting strips 4. In the above-mentioned manner, a plurality of fabric vanes 1 are united to the vertical strips 4 so as to form a so-called Venetian blind.

In the embodiment shown in Figures 1, 2 and 3, where the invention is applied to a rolling blind, the upper end of the blind made in the above-mentioned manner is connected to a rotatable drum or reel 6 provided with a spring 7 usually employed.

In the embodiment shown in Figures 4, 5 and 6, where the invention is applied to a

collapsible blind, the upper end of the connecting strips 4 are united to a fixed bar 8. On this bar is provided a guide pulley 9 about which is passed a cord or cable 10 for raising or dropping the blind. In this embodiment, at the points where the vertical strips 4 are connected, there are provided the reinforcing and stretching members 11 fixed to the vanes. The member 11 is made of a sheet of metal, such as aluminium, and has a length equal to the width of the vane 1, i. e. distance between the rods 3 on both edges. In the member 11 a plurality of claws 12 are stamped out, whereby the member 11 is securely fixed to the vane 1 by bending the penetrated point of the claws 12 on the reverse side of the vane. On the member 11 there is also formed an eyelet having a flange 13 which is passed through an opening formed in the vane 1 and is turned outwardly on the reverse side of the vane. The cord 10 is passed through the eyelets 13.

From the foregoing it will be seen that in the window-blind made according to my invention, the strips of fabric forming the vanes are effectively maintained in a stretched position being not crumpled, so that it will be prevented from deformation, and yet when desired it may be subjected to a washing operation by readily removing the stretching rods 3.

The connection of the vanes 1 by means of flaps 5 to the vertical strips 4 renders it possible that the vane 1 may be united to the vertical strips 4 at a desired angle and with a desired interval of distance.

While I have shown two forms of embodiments of my invention, it will be understood that various changes may be made within the scope of the appended claims.

What I claim is:—

1. A window-blind comprising a plurality of vanes each consisting of a strip of woven fabric having tubular edges and flaps on both selvages, stretching rods inserted through said tubular edges on the vane, vertical connecting strips made of flexible material to which said vanes are united by means of said flaps formed on the edges of the vane, and reinforcing and stretching members fixed

to the vanes, which members each consist of a metal sheet having stamped out claws and a flanged eyelet by means of which the member is securely fixed to the vane.

2. A window-blind comprising a plurality
5 of vanes each consisting of a strip of woven fabric having tubular edges and flaps on both selvages, stretching rods inserted through
10 said tubular edges on the vane, vertical connecting strips made of flexible material to which said vanes are united by means of said flaps formed on the edges of the vane, re-
inforcing and stretching members fixed to the vanes, which members each consist of a metal
15 sheet having stamped out claws and a flanged eyelet by means of which the said member is securely fixed to the vane, a fixed bar connected to the upper ends of the vertical connecting strips, a guide pulley provided on said
20 fixed bar, and a cord for manipulating the blind, said cord being passed around the said guide pulley and through said eyelets in the stretching members fixed on the vanes.

In testimony whereof I affix my signature.

TOSHI-KO IWATA.

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