Dec. 4, 1934. J. PICCO 1,983,046

VENTILATING WINDOW SHADE

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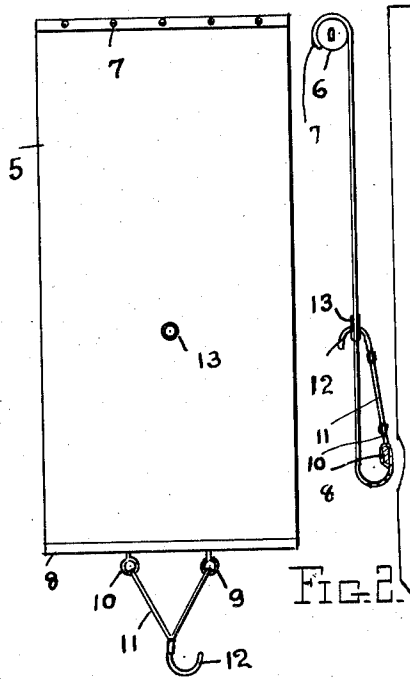


FIG. 1.

FIG. 2.

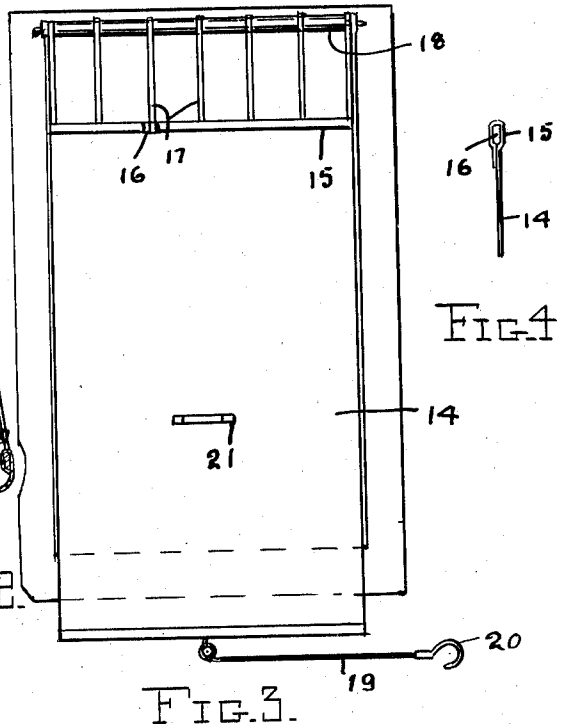


FIG. 3.

FIG. 4

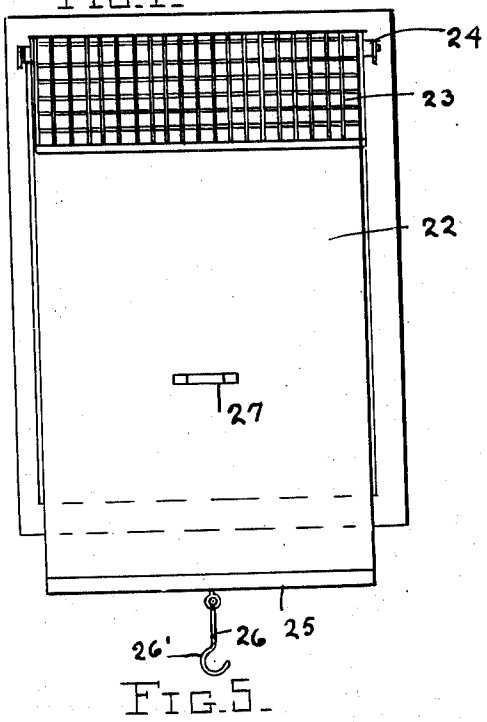


FIG. 5.

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VENTILATING WINDOW SHADE

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9 Claims. (Cl. 1.56—10)

This invention relates to an improved window shade, and its leading object is to provide a window shade which may be employed in the conventional manner for shading a window, and which may be also employed for shading only a part of the window while allowing ventilation of the upper part of the window.

Another object of the invention is to provide a combined window shade and ventilating screen, which may be operated to shade the major lower part of a window, to ventilate the upper part of the window, and to also, when desired, ventilate the lower part of the window.

With the above and other objects in view, the invention consists in certain new and useful constructions, combinations, and arrangements of parts, clearly described in the following specification, and fully illustrated in the accompanying drawing, in which:—

Fig. 1 is a front elevation of a window shade.

Fig. 2 is an edge view, showing the lower part of the shade held in elevated position.

Fig. 3 is a front elevation of a combined window shade and strips or bands.

Fig. 4 is a detail view showing the reinforcing bar for the upper end of the shade.

Fig. 5 is a front elevation of another form of a combined shade and screen.

Referring to the accompanying drawing illustrating the practical embodiment of the invention 5 designates a window shade, which may be constructed of any material, and which may be mounted on the usual spring roller 6. For this purpose the upper end of the shade is provided with reinforcing eyelets 7. The lower end of the shade is provided with a transverse pocket 8 in which a suitable stiffening element is disposed, and which carries the pull rings 9 and 10, spaced from each other. These pull rings are connected by the pull cord 11 to the hook 12.

The shade is further provided with an eyelet 13, located at a point considerably above the lower end of the shade and approximately midway of the side edges thereof. The hook 12 is adapted to be inserted in the eyelet 13, so as to support the lower end of the shade above the lower end of the window, when it is desired to expose the same for ventilation, without operating the winding spring roller.

In Fig. 3 I show a construction of the shade which includes the shade 14, the upper end of which is formed with a transverse edge pocket 15 in which the steel or metal reinforcing bar 16 is disposed, as shown in Fig. 4. To this reinforced edge the flexible strips or bands 17 are connected or stitched, while the opposite ends of the tapes or strips are fastened to the spring roller 18.

The lower end of the shade is equipped with a pull cord 19, which carries a hook 20, which is designed to engage the retaining strap 21, which is attached to the body of the shade or curtain.

In Fig. 5 I show another form of the invention, wherein the shade 22 is provided with a reinforced upper end, similarly to that shown in Fig. 4, and the mesh work or screen 23 is connected thereto. This screen is attached to the spring roller 24. The lower end of the shade is equipped with the reinforcing pocket 25 and is provided with a pull cord 26, which carries the hook 26'. This hook is designed to engage the retaining loop strap 27, which is fixed by adhesive or other means on the shade.

The strips or bands 17 are fastened to the upper edge of the shade or around the stiffening rod 16, or they will be directly stitched to the upper part of the edge or pocket 15 and connected to the spring roller by their other ends, the screen also being directly stitched to the upper edge of the shade where the stiffening rod or metal blade is therein inserted.

The stiffening member will eliminate the difference of flexibility or elasticity of the shade and ventilating elements that will occur when the shade is pulled down against the tension of the spring roller and so prevent the shade from gathering or jamming upon the roller while being operated.

In using the forms of combined ventilating elements and shade constructions, shown in Figs. 3 and 5, the shade may be lowered so that the window is fully shaded, without ventilation, or may be lowered so that the screen construction on the top of the shade will depend below the spring roller, as shown in Figs. 3 and 5, thereof allowing a free flow of air at the upper part of the window, while shading the lower part of the window. Or, when desired, the lower part of the shade may be looped upon itself, so that the lower part of the window and the upper part of the window will be unshaded, to permit ventilation at both ends of the window.

The improved window shade therefore permits of complete or partial shading of the window, with ventilating effects which cannot be obtained with the use of the window shades now generally employed.

Having described my invention, I claim as new:—

1. A window shade consisting of a spring sup-

porting roller, a shade connected to said spring roller by means of a screen, and means for looping the lower part of the shade against the body of the shade, whereby the upper and lower parts of a window may be ventilated while the intermediate part thereof is shaded.

2. A window shade consisting of a spring roller, a shade having a screen on its upper end connected directly to the roller, and a connecting element on its lower end adapted to engage an intermediate part of the shade for looping the lower end of the shade.

3. A window shade having a thin metal bar secured to its upper end and a series of spaced flexible members secured around the bar and adapted to be connected to a shade roller, whereby the body of the shade may be supported below the roller by the flexible members which thus provide a normally open ventilating space above the shade.

4. A common rollable shade provided with flexible ventilating element at its upper part, a single thin metal rod secured at the upper edge of the shade and the lower edge of the flexible ventilating element so preventing said shade and said ventilating element from shifting toward its center when the entire structure is being wound or unwound by a common spring roller, and so preventing the cracking up of the shade material by gathering upon said roller when being operated.

5. The combination with a winding spring roller and a shade having an eyelet fastened into the cloth at midway of its ends, of a hook carried by the lower end of the shade and adapted to be inserted through the eyelet hole whereby the lower end of the shade may be looped upwardly to ventilate the lower part of the window by establishing an open free space at the bottom of the window and letting the air enter the room by pushing up the lower window sash.

6. The combination with a spring winding shade roller, of a plurality of flexible strips or tapes connected at their upper ends to said spring roller in spaced relation and their lower ends being stitched or connected to the upper edge or pocket of a common window shade, the upper edge of said shade being provided with a transverse pocket wherein a thin stiffening bar is disposed to prevent the flexible elements from gathering upon the spring roller, a hook or connecting element connected to the lower edge of the shade, and a connecting element secured on the middle center of the shade whereby the shade may be looped up by means of said hook, and said connecting element to permit the ventilation of the lower part of the window simultaneously with the upper part of the window.

7. A window shade having a longitudinal tubular edge or pocket on its upper end, a thin stiffening rod inserted and secured into said edge or pocket, a flexible screen secured or stitched to said edge by its lower part while its upper part is secured to the spring roller, whereby said screen will permit the ventilation of the upper part of the window when the shade is pulled down below the spring roller and the stiffening rod will prevent the entire structure from jamming upon the spring roller while being operated.

8. A window shade comprising a common spring roller, a shade section having a stiffening member or rod secured to its upper edge or pocket, and spaced apart, flexible ventilating means secured to said upper edge of the shade by its lower ends while its upper ends are secured to the spring roller, so providing a ventilating space between the upper end of the shade and the roller when the upper edge of said shade is located below the spring roller.

9. A window shade consisting of a spring roller, a shade having a screen on its upper end directly connected to the spring roller, a stiffening bar or metal rod secured at the point where the screen and the shade join together whereby such stiffening bar will prevent said screen and shade from buckling upon the spring roller while being operated, whereby a ventilating space will be obtained when the shade is pulled down and the screen extended between the upper edge of the shade and the spring roller.

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